Sep28'540

NATIONAL FISHERMAN

SEPTEMBER 1954

Formerly **ATLANTIC FISHERMAN**

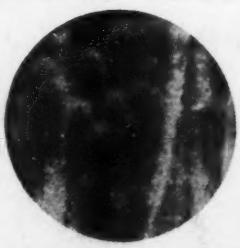
Longer, Stronger Life for Columbian Manila Rope

You get THIS : instead of THIS

with Columbian's Amazing Anti-Rot Treatment . . . even after years of use!

Laboratory Tests Prove Power of Special Columbian Treatment

Microphoto of *treated* Manila fibres after 2-week incubation with green mold spores. *Only original spores applied for test are present.*



Microphoto of *untreated* fibres after same 2-week test shows jungle of spores whose "roots" feed on fibre, leaving it rotted, useless.

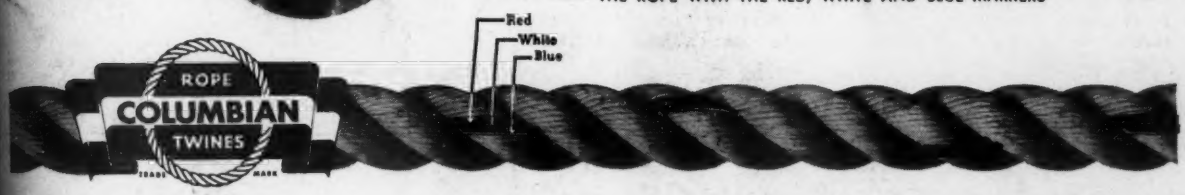
- For tough, resilient strength . . . the very best Manila fibres.
- For internal mechanical friction . . . thorough, lasting lubrication.
- And now . . . for protection against decay-producing moisture . . . the new Columbian Anti-Rot Treatment that stops mold, mildew, fungi and decay bacteria cold!

Thousands of laboratory experiments tested the Columbian Anti-Rot Treatment for effectiveness against all types of cellulose-attacking organisms found in soil, air, fresh and salt water.

Ten years of actual-usage reports from all parts of the world prove that effectiveness.

Every foot of Columbian Manila Rope is adequately protected against decay for YOUR climate, YOUR uses, YOUR methods of handling!

COLUMBIAN ROPE COMPANY, Auburn, "*The Cordage City*", N.Y.
THE ROPE WITH THE RED, WHITE AND BLUE MARKERS



Boston Office and Warehouse — **38 Commercial Wharf**

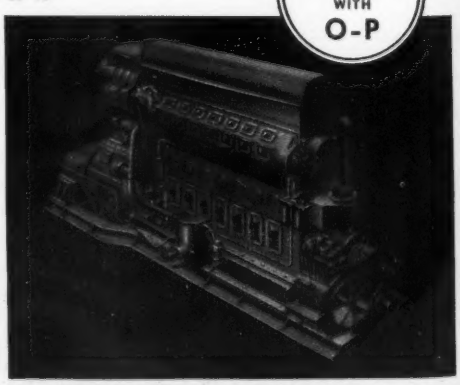
"It's all over my head. All I know is that this same boat has gone over here for years—but never at that speed nor with that kind of load . . . and all because of something called Re-Powered with O-P."

You may have missed this particular conversation in your waters, but chances are that you'll hear . . . "Re-Powered with O-P" many times along the waterfront in months to come.

This new marine Opposed-Piston engine was designed especially for putting more power . . . more performance in your engine space. All accessories . . . lube oil cooler, filters, pumps, heat exchanger and attendant piping are engine mounted. You need only run in raw water lines and fuel line to your power hold space—and you have a complete, compact power package.

Add reliability of Opposed-Piston design *proved* by more than 5 million installed horsepower in all industry, and you'll agree that your next move is to your telephone to call your nearby Fairbanks-Morse Marine Specialist. Or write Fairbanks, Morse & Co., Chicago 5, Illinois.

RE-POWER WITH O-P



Model 38F Marine O-P Diesel for the 225 to 750 horsepower class.

FAIRBANKS-MORSE

a name worth remembering when you want the best

DIESEL AND DUAL FUEL ENGINES • DIESEL LOCOMOTIVES • RAIL CARS • ELECTRICAL MACHINERY
PUMPS • SCALES • HOME WATER SERVICE EQUIPMENT • FARM MACHINERY • MAGNETOS

Surrette

MARY ANN—newest addition to the Gloucester fishing fleet, is a 72 foot dragger built by Harvey Gamage, South Bristol, Maine. The Captain and owner, insisting on the best for batteries, chose Surrette's HHG-21—115 volt.

For

WORK BOATS
PLEASURE BOATS

Fishermen—the men who are so dependent on the power required by their batteries—starting, lighting, radio, telephones—choose SURRETTE.

Architects—who recommend the best—and know from experience—choose SURRETTE.

Builders—Year after year, more and more builders everywhere demanding the best in material and construction insist on SURRETTE.

- Greatest capacity in least space
- Longest Life
- Thick—high—positive plates
- Engineered and built for marine use

MOST POWERFUL LONGER LASTING

Surrette Marine batteries can be obtained from the following distributors

W. N. White & Company, Halifax, Nova Scotia
Harris Company, Portland, Maine
T. Cooney & Sons, Gloucester, Massachusetts
Surrette Supply Company, Peabody, Massachusetts
Marblehead Yacht Yard Inc., James E. Graves Co., Marblehead, Mass.
Louis Posner, Fish Pier, Boston, Massachusetts
Leo's Battery Service, New Bedford, Massachusetts
Robert Horman, New Haven, Connecticut
West Haven Shipyard, West Haven, Connecticut
Surrette Storage Battery Co., (Warehouse) Sherman Ave., New York
Maripet Supply Corporation, New York 17, New York
Freeport Marine Supply, 51 W. Merrick Rd., Freeport, New York
George Wingerter, 164-02 Cross Bay Boulevard, Howard Beach, L. I., New York
Marine Electric Corporation, Brooklyn, New York
United Boat and Dock Service, City Island, New York
Sutter Brothers, Gerritson Beach, Brooklyn, New York
Charles W. Rogers, Manasquan, New Jersey
Marine Equipment & Supply Co., Philadelphia 6, Pa.
Johnson & Towers, Philadelphia, Pennsylvania
Quaker Battery Service Co., Philadelphia, Penna.
Johnson & Towers, Baltimore, Maryland
United Oil Company, Baltimore, Maryland
Capitol Marine Supply, Washington, D. C.
Norfolk Marine Company, Norfolk, Virginia
Machine & Supply Company, Beaufort, North Carolina
Hay Oil Company, Charleston, South Carolina
Bay Machine & Welding Company, Panama City, Fla.
Chapman Electric Company, Mobile, Alabama
Kennedy Marine Company, Biloxi, Mississippi
Diesel Marine Service, Cameron, Louisiana
Olympic Power Application Company, New Orleans, La.
Byrne & Rice Supply Co., Morgan City, Louisiana
Lake Charles Marine Sales, Lake Charles, Louisiana
McIntosh Electric Supply Company, Beaumont, Texas
Stewart & Stevenson Services, Inc., 4516 Harrisburg Blvd., Houston 11, Texas
Nash & Cotton, Galveston, Texas
Producers Marine Service, Port Isabel, Texas
Ewing Battery Company, Brownsville, Texas
Marine Electric Service, Box 56, Port Isabel, Texas

Surrette MARINE BATTERIES

Surrette Storage Battery Company, Inc., Jefferson Avenue, Salem, Mass.

powered for Performance

26' Bryant-built stock work boat, 25 H.P. Evinrude outboard motor installed in stern well.

BIG TWIN

25 O.B.C. certified B.H.P. at 4,000 R.P.M. Gearshift, separate plug-in fuel tank.

PROVED PERFORMANCE! No "maybe" when it came to picking the power plant for this husky work boat. In identical hulls the Evinrude 25 H.P. Big Twin had conclusively proved its advantages over conventional engine installations of the same rated horsepower. Higher speed, light or loaded. Greater maneuverability. Important space saving. Easy beaching. *Far lower cost*—as much as $900 *less* than the conventional installations.

With *performance,* an Evinrude gives you stamina and low upkeep you couldn't beat in any type of motor. A complete line, 3 to 25 H.P., to meet the widest range of work boat needs. See your Evinrude dealer—look for his name under "Outboard Motors" in the yellow pages of your phone book. For complete literature write EVINRUDE MOTORS, 4519 North 27th Street, Milwaukee 16, Wisconsin.

In Canada: Manufactured by Evinrude Motors, Peterborough, Ontario

Big Twin is also available in 20" extra depth model suitable for transom heights to 35". Photo shows Bristol Bay, Alaska, salmon gillnetters converted to power with this motor.

EVINRUDE

OUTBOARD MOTORS

September 1954 Vol. 35 No. 8

In this issue

Oyster Industry Discusses Quality and Sanitation 13

New Trawler "Capt. Hazard" Joins Texas Shrimp Fleet 17

Pacific Salmon Troll Fishery Has Grown Rapidly 18

Three Hundred Shrimpers Are Blessed at Delcambre 21

New England Fishing Fleet Damaged by Hurricane 22

Halibut Catch Is Expected to Break All Records This Year 31

NEWS REPORTS

Alabama 27
Boston 35
California 28
Connecticut 23
Florida 33
Georgia 27
Gloucester 34
Great Lakes 24
Long Island 49
Louisiana 27
Maine 20
Maryland 26
Michigan 24
Mississippi 26
New Bedford 23
New Jersey 34
North Carolina 26
Oregon 28
Pacific Coast 28
Provincetown 47
Rhode Island 42
South Carolina 30
Texas 25
Virginia 30
Washington 30
Wisconsin 24

REGULAR DEPARTMENTS

Fishery Progress 9
Equipment and Supply News 36
Boat Catches for August 43
Canadian Report 51
Vineyard Bailings 50
Where-to-Buy Directory 52
Classified Advertising 54

Yearly subscription rates: United States, $3; Canada, $4; Foreign, $5. Single copies, 35¢.

Acceptance under section 34.64, P.L.&R., authorized at Manchester, New Hampshire

NATIONAL FISHERMAN

Formerly **ATLANTIC FISHERMAN**

Serving the Commercial Fishing Industry of the United States

School-Lunch Programs Using More Fish

With schools in session again, it is appropriate to review the excellent program of fishery product demonstrations being presented to school lunch cooks and managers by the Fish & Wildlife Service.

Sponsored by the Educational and Market Development Section of the Service, the fish cookery demonstrations have been held in numerous cities and towns in well over one half of the States in the country. This Fall's program calls for 10 demonstrations in Iowa, 12 in Wisconsin and 22 in West Virginia.

The Federal School Lunch Program is currently operative in about one-half of our schools. Of the 28,500,000 pupils in schools participating in the Federal program, nearly 10,000,000 eat a school lunch in the school lunchroom every day of the school year. Assuming that only one lunch per week per student included the minimum protein serving of 2 ounces of cooked fishery product, a total of 1,250,000 pounds of cooked fish would be required each week throughout the school year.

The experience gained from the Service's program of fish cookery demonstrations for school lunch personnel has shown that the managements and the patrons of the school lunches are overwhelmingly receptive to quality fishery products, tastily prepared and attractively served.

Fishery products were used 48 percent more frequently by the school lunchrooms in Louisiana following an extensive program of 52 fish-cookery demonstrations. Prior to the demonstrations in five New England States, schools represented at the meetings served fish 1.7 times per month. After the demonstrations, these schools increased their use of fish to 2.7 times per month—a 59 per cent gain.

Until a few years ago, there was a widespread feeling that children did not like fish and would not eat it at school. Actual tests in schools, however, have proven that if fish (or shellfish) is prepared properly and served attractively, school children will not only eat it but acquire a liking for it.

Today's children are tomorrow's customers. If they are trained to like fish and shellfish when they are young, it is likely that they will develop a fondness for these products-of-the-sea that will carry on as they become heads of families.

The increase in the use of fish in schools is a good indication of the effectiveness of the fish-cookery demonstrations. However, this immediate increase in fish consumption should not be considered as the only benefit of the program.

By learning more about the nutritional value of the foods they serve, along with points on its purchase, care, and handling, the managers can give their children better meals. This is reflected in the health of the younger generation.

The eating habits learned by the children at school are also communicated to their homes. By creating greater acceptance of fish in the schools, the demonstrations can help increase its use in the community as a whole. Thus, the fishing industry, the children, and their parents all benefit from this program.

Published monthly by Atlantic Fisherman, Inc., Goffstown, New Hampshire

P. G. LAMSON, President — GARDNER LAMSON, Publisher and Editor — A. E. BROWN, Managing Editor

Member: National Business Publications and Business Publications Audit of Circulation

Advertising Representatives: Kennedy Associates, 60 East 42nd Street, New York 17, N. Y. Murray Bothwell, 234 E. Colorado St., Pasadena 1, Cal.; Wm. C. Walters, Box 619, Atlanta 1, Ga.

GM DIESEL
CASE HISTORY No. 5312-224

BOAT AND OWNER: 65-foot dragger "THERESA S" owned by Mike Sarunich, Seattle, Washington. Purse seining and dragging off Washington and British Columbia coasts.

INSTALLATION: General Motors "6-110" 2-cycle Diesel replaced 4-cycle Diesel. Turns 50"x40" screw through 3.7 to 1 reduction.

PERFORMANCE: Switch to smaller, lighter, more powerful GM Diesel increased cruising speed from 7.5 to 10.5 knots—top speed to 10.8 knots. Payload also increased 5 tons.

GM
GENERAL MOTORS
DIESEL POWER

Cruises 3 Knots Faster

Since He Switched to 2-Cycle Diesel Power

When Captain Sarunich replaced his 4-cycle Diesel with a General Motors 2-cycle "6-110" the "THERESA S" really got a move on. Her cruising speed jumped from 7.5 to 10.5 knots and now she hauls 5 more tons of fish.

That's because her GM "6-110" Diesel packs more power in a smaller, lighter engine that takes up less space—frees room for more payload. Captain Sarunich says, "My boat is now much easier to handle; her maneuverability is better. The new '6-110' isn't so hard on the boat; there's less vibration than with the old Diesel."

Delivering power at every piston downstroke (not every *other* downstroke as in 4-cycle Diesels) General Motors 2-cycle Diesel engines help boats accelerate faster, maneuver easier, respond to controls quicker. These smooth-running Diesel engines burn fewer gallons of safe, low-cost fuel—start at the push of a button—give years of trouble-free performance.

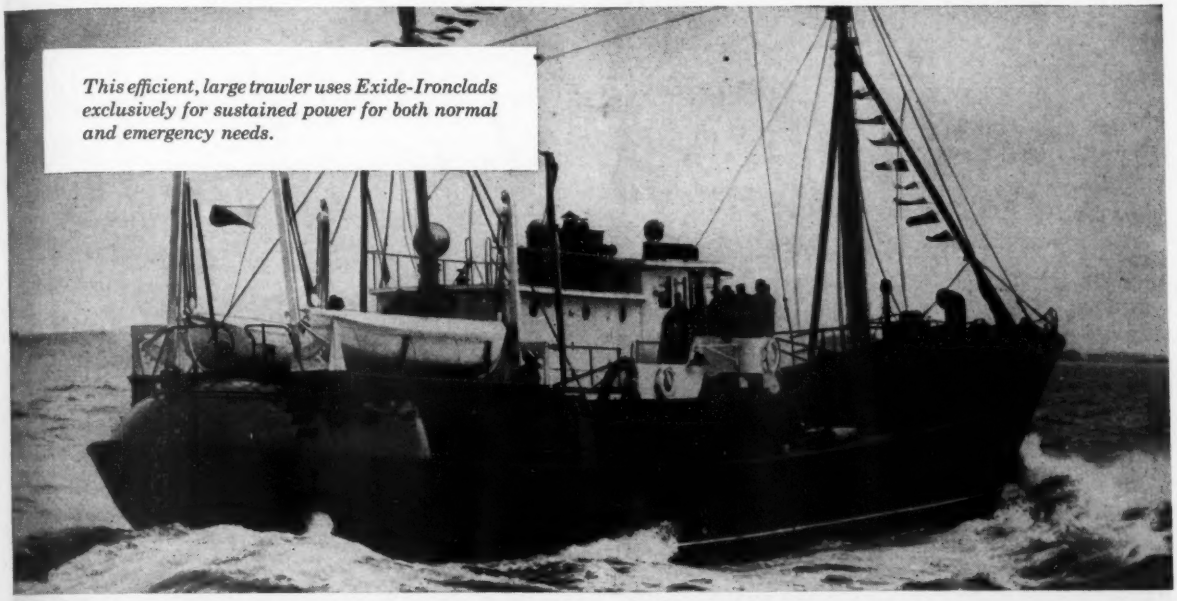
The "6-110" is also available in the new 409-s.h.p. "110 Tandem Twin" priced much lower than other Diesels of comparable power. For complete details, ask your GM Marine Diesel distributor or write:

DETROIT DIESEL ENGINE DIVISION
GENERAL MOTORS • DETROIT 28, MICHIGAN
Single Engines . . . 30 to 300 H.P. Multiple Units . . . Up to 864 H.P.

Sales, Factory-Engineered Parts and Authorized Service through distributors and dealers in all important marine locations. SEE your local Telephone Classified Directory or write, wire or phone for name of nearest Distributor.

SAFE, RELIABLE BATTERY POWER FOR BIG TRAWLERS

. . . starts with dependable Exide-Ironclads!



This efficient, large trawler uses Exide-Ironclads exclusively for sustained power for both normal and emergency needs.

ONE boat in a well-known fishing fleet, this vessel depends on a 56 cell MVAH-21 Exide-Ironclad battery to operate this equipment: Loran, ship-to-shore telephone, depth finder, fathometer, oil burner, lights, motor on the oil-burning range. Exide-Ironclads were bought because of their utmost reliability and safety. They pack more power in less space, have a longer working life. Add them all up. Lower costs for operation, maintenance and depreciation make Exide-Ironclads your best power buy—AT ANY PRICE!

THE POSITIVE PLATES are the heart of any battery. Only Exide uses a slotted tube construction. By use of tubes, more active material is exposed to the electrolyte, providing *greater power.* Also, more active material is retained, giving *longer working life.*

RUGGED POWER for all fishing vessel needs! Exide-Ironclads give peak performance . . . on many jobs . . . for a long, long time. For full details, call your Exide sales engineer—or write for Form 5190 (Exide-Ironclad Batteries for Marine Service), and accompanying specification sheets.

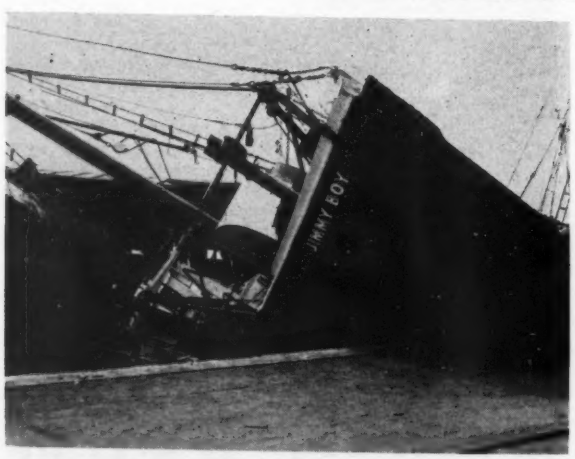
Your best power buy
. . . AT ANY PRICE!

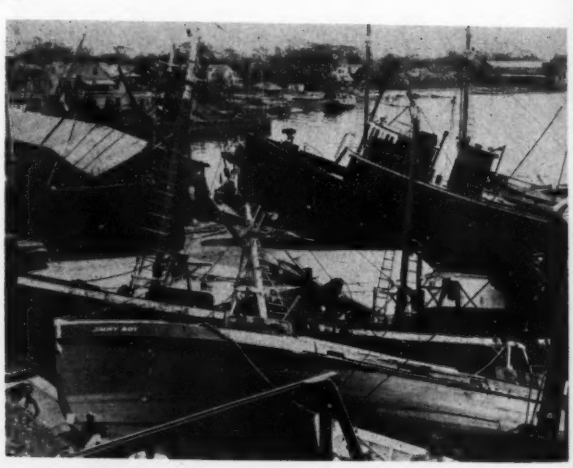
Exide®
IRONCLAD® BATTERIES

Exide INDUSTRIAL DIVISION, The Electric Storage Battery Company, Philadelphia 2, Pa.

We Extend our Deepest Sympathy . . .

but from these ruins we know a greater New England fishing fleet will be built





PEMCO SERVICE

PERKINS-MILTON CO. INC.

376 Dorchester Ave.
BOSTON

4 Water St.
FAIRHAVEN

PEMCO SERVICE

FISHERY PROGRESS

Economic • Legislative • Technical

Fish stick duty bill recently signed by President Eisenhower provides for 20% ad valorem tariff on breaded uncooked fish sticks and 30% ad valorem tariff on cooked fish sticks. Higher duties will enter into effect as soon as practicable on date to be specified by President in notice to Secretary of Treasury following such negotiations as may be necessary to effect modification or termination of international obligations of United States with which amendment would be in conflict.

Fish sticks are being introduced on Canada's west coast by a British Columbia firm, and the product is to be marketed in near future in Vancouver.

Rights of U. S. fishermen and others on high seas and in territorial waters of foreign countries will be protected under bill signed by President. This legislation was endorsed by National Fisheries Institute at their last convention, after an agreement was reached between various segments of industry including tuna, shrimp, groundfish, salmon, etc.

The new law establishes certain principles for American fishing industry when operating on high seas and in territorial waters of foreign countries, and is expected to strengthen position of State Department in protection of American fishing vessels and other craft when operating beyond 3 miles offshore. Territorial waters claims far beyond three-mile limit have in past led to difficulties between Mexico and U. S. shrimpers.

Test market promotion campaign on fish fillets and fish sticks will be inaugurated by National Fisheries Institute September 20 in Columbus, Ohio, and will continue until Thanksgiving. Fish fillets and fish sticks will be advertised in Columbus newspapers and on radio and television stations, and this advertising will be backed up with publicity program as well. Retailers, chain stores, distributors and restaurants in Columbus area have shown much interest in the industry program, and will cooperate with N.F.I. Fish & Wildlife Service also is cooperating in the matter of fish cookery demonstrations.

Fish fillet and fish stick firms from United States, Canada, Iceland and Norway agreed at meeting in Boston on August 5 to participate in the joint advertising test program. Purpose of test is to determine effectiveness of such a joint program in increasing consumption of fish fillets and fish sticks.

Social Security bill which has been signed by President provides for expanded coverage and an improved old-age and survivors insurance program. New law includes all persons, except minors employed by parents engaged in fishing industry. Affected are not only fishermen on boats or vessels, but also fishermen who operate drop nets and haul seines, clam diggers, and employees of commercial trout and other fish farms.

The new coverage is effective January 1, 1955. Employee's social security tax will be two percent of his wages up to a maximum of $4200 a year, and employer will contribute like amount. Employer is responsible under law for withholding employee's tax and reporting wages every three months.

Additions to fishing fleet during first seven months of 1954 amounted to 529 vessels of 5 nets tons and over, an increase of 87 as compared with same period in 1953. Principal gain occurred in Gulf States, where 255 vessels were documented, compared with 136 in corresponding period last year. Five surplus trawlers located at Bremerhaven, Port of Embarkation, Germany, recently were offered for sale by Army Quartermaster Corps, bids having closed September 2. The vessels include the *Pan Trades Andros, Tern, Swell, Pacific,* and *Josephine Ess.*

North Pacific Treaty bill has been signed by President Eisenhower. This legislation gives effect to International Convention for high seas fisheries of North Pacific Ocean. Parties to convention are United States, Canada and Japan.

Milton C. James, former assistant director of Fish & Wildlife Service, has been named temporary director of Commission, and has undertaken his duties at Commission headquarters in Vancouver, British Columbia.

Landings of shrimp in U. S. Gulf area during first seven months of 1954 reflect an 18,000 barrel gain over like period for 1953. Substantial portion of this increase was landed at Texas ports, according to recent report of Fish and Wildlife Service.

Ex-vessel value of 1954 catch has been considerably less than in 1953, however, due to lower market price and fact that bulk of production has consisted of third and fourth count shrimp. Despite increased landings national frozen shrimp inventory figure dropped from 26,390,000 lbs. as of Jan. 1 to 17,190,000 lbs. on Aug. 1.

Fish stick production in June, including both cooked and uncooked, amounted to nearly 4½ million pounds—largest ever reported for any one month. In first six months of this year, fish stick output was 22,308,900 lbs. This was from 33 plants, many of which packed for more than one company, and is believed to represent practically entire United States pack of fish sticks. Only 7,501,-900 lbs. of fish sticks were produced in U. S. in whole of 1953.

Heavy sockeye salmon run is taking place in Puget Sound area's Fraser River. Latest figures available, which cover season through August 26, show 4,149,000 fish landed in Canada and United States, compared with 1942, 1946 and 1950 cycle years of 2,504,000 fish, 1,402,000 fish and 2,388,000 fish respectively. It is believed that pack of Puget Sound sockeyes will to some extent relieve shortage resulting from low pack of reds and sockeyes in Alaska.

U. S. civilian consumption of fishery products per person during first half of 1954 was slightly smaller than year earlier. Reduction came mostly in canned fish.

Consumption of frozen fishery products was maintained at year-ago rate in large part due to expansion in use of frozen "fish sticks." Retail prices of fish and shellfish, as a group, averaged close to those of first half of 1953.

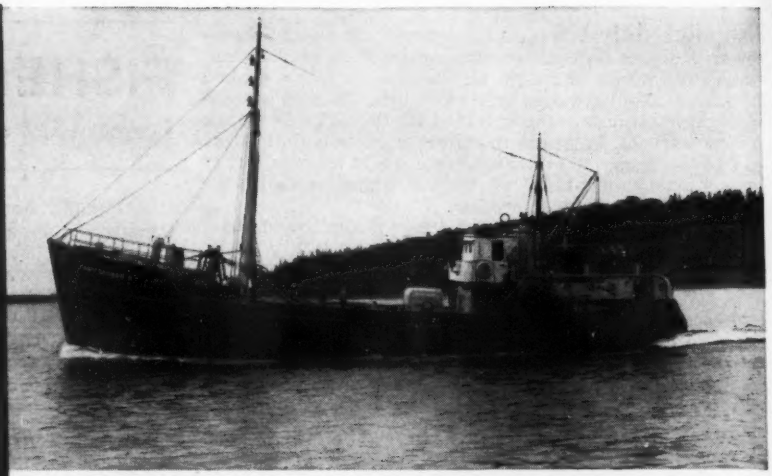
Commercial landings of fish and shellfish through about midyear were at least as high or perhaps slightly higher than in same months of 1953. Heavier landings of tuna fish this year than last were outstanding feature in overall production situation during first half of 1954.

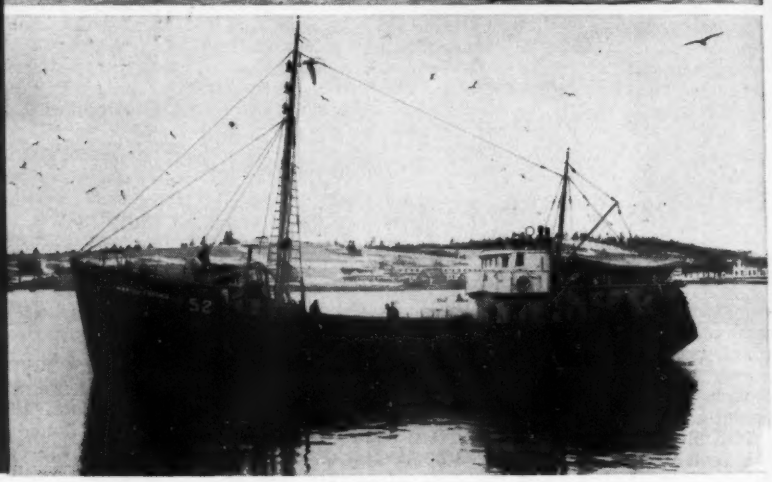
This year's canned fish packs will start moving to market in volume in a few weeks. Tuna is only popular canned fish item for which large pack is in prospect for this year. Canned salmon pack probably will decline for third year in a row because of shortage of pink salmon in Puget Sound area and conservation restrictions on fishing in some Alaskan waters. Size of packs of mackerel and California sardines (pilchards) probably will be small again this year.

Meeting of Atlantic States Marine Fisheries Commission will be held at Emerson Hotel, Baltimore, Maryland, on October 4, 5 and 6. Opening general sessions of this thirteenth annual meeting will be devoted to reports of officers and committees and summaries by Chiefs of Branches of Fishery Biology and Commercial Fisheries of U. S. Fish and Wildlife Service. Subjects for other general sessions will include problem of out-of-State boats and recent court decisions and legislation of importance.

Captains of "Cape George II" and "Marion Crouse" report:

"Atlas engines have not caused loss of 5 minutes fishing time in 5 years... all major original parts still good"





These outstanding engine performance records are the reasons why the "Cape George II" and "Marion Crouse" both average a profitable 11 months of the year on the rough North Atlantic.

In the last 5 years, both draggers, fishing out of Lunenburg, Nova Scotia, have made 350 trips to sea without having an engine failure. They've been at the repair dock only for regular annual inspections—when just a few piston rings and gaskets were replaced in their 400 h.p. Atlas Diesels.

It's easy to understand why Captains Harry Demone and Walter Crouse, owners and skippers of the "Cape George II" and "Marion Crouse," respectively, sum it up this way: "If you want to catch fish at a profit, power your boat with an Atlas." The 3½ million pounds of fish each dragger nets yearly are ample proof!

Like these Captains, Atlas and Superior owners everywhere rely on the same kind of dependable, low-cost power to build their fishing profits. Even under adverse conditions, these sturdy engines establish records for long, trouble-free operation. Why not visit or call the nearest office listed below and get further proof of this now?

DIESEL DUAL FUEL GAS — THE NATIONAL SUPPLY COMPANY — ATLAS Imperial DIESEL ENGINES — Superior ENGINES — DISTRIBUTOR OF Lister DIESELS IN U.S.A.

THE NATIONAL SUPPLY COMPANY

ENGINE DIVISION PLANT AND GENERAL OFFICES: SPRINGFIELD, OHIO

SALES AND SERVICE POINTS: Gloucester, Massachusetts • Houston, Texas • Fort Worth, Texas • San Diego, California Oakland, California • Terminal Island, California • Ketchikan, Alaska • Washington, D.C. • Chicago, Illinois • Portland, Oregon • Astoria, Oregon • Casper, Wyoming • Halifax, Nova Scotia • Vancouver, B.C. • Toronto, Ontario • Park Rapids, Minnesota • New York, New York • Seattle, Washington • New Orleans, Louisiana • Pittsburgh, Pennsylvania

Maximum Anti-Fouling Protection At Extremely Modest Cost!

Cost conscious ship owners who demand the best possible anti-fouling protection at the lowest possible cost, find the answer in Federal Special Tropical H.T.S. Its great success over the past 20 years has been established by thousands of fleet operators. They have witnessed the startling absence of either vegetable or animal matter on their vessel's bottoms when drydocked after unusually long periods of time in service.

The proving ground for H.T.S. has been in semi-tropic and tropic zones where marine growth is the most prolific of the world's waters. The letters H.T.S. indicate *High Toxic Strength*, a feature which is due not alone to its heavy copper content but also to the efficient chemical performance of the material itself. It *consistently* provides protection down to the last vestige of its film, throughout the period of immersion.

FEDERAL SPECIAL TROPICAL HTS (HIGH TOXIC STRENGTH)

For such a product, its cost is surprisingly low. The owner who specifies H.T.S. can assure himself of considerable savings in fuel costs and frequent haulouts. It is available through Federal Agencies in all principal United States and world ports.

THE FEDERAL PAINT COMPANY, INC.
33 RECTOR ST., NEW YORK 6, NEW YORK

Mail coupon for Price List and Complete Information

The Federal Paint Co., Inc., Dept. N
33 Rector St., N.Y.C. 6

Gentlemen:
Please send full information and price list on H.T.S.

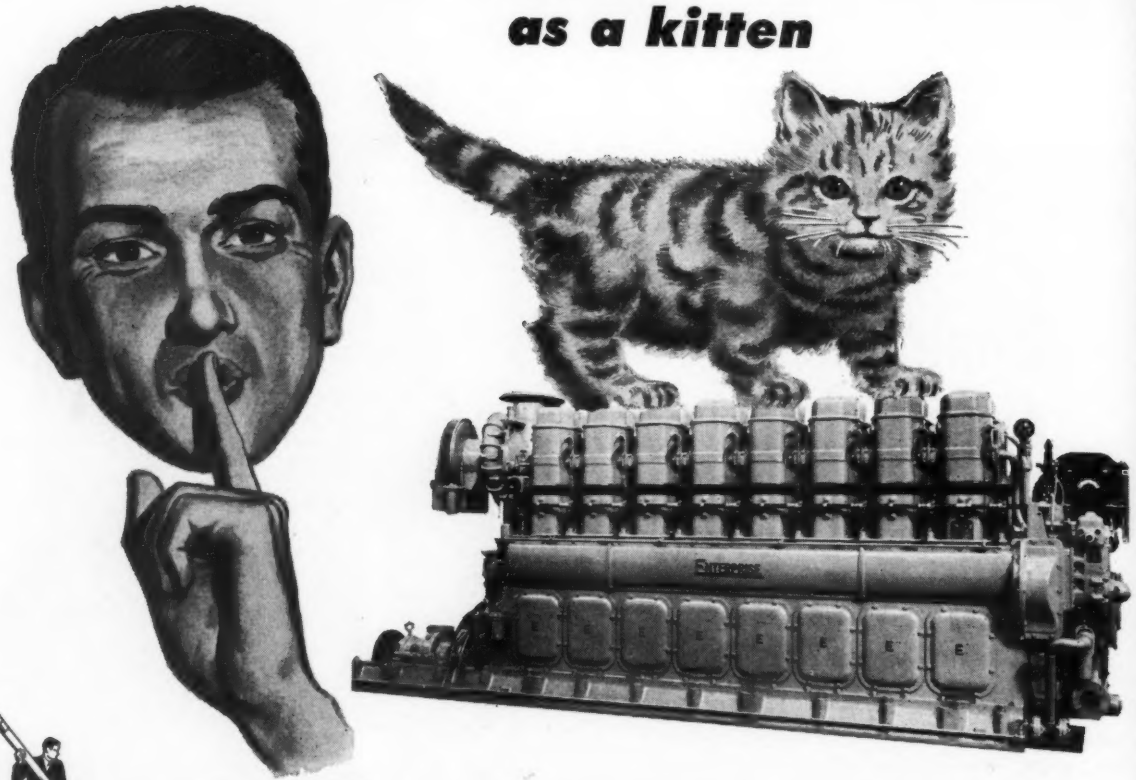
Name.....

Firm.....

Address.....

City.....State.....

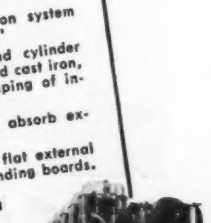
QUIET
as a kitten



Check these points on Enterprise Quiet-Running Diesels

- Complete precision surface finishing of all moving parts to close tolerances permits accurate control of weights and balances, helps keep noise and wear to a minimum.
- Conservative speed ratings result in major reduction of noise.
- Carefully engineered injection system minimizes "injection knock."
- Base, block, gear case and cylinder heads are of heavy-sectioned cast iron, providing a maximum damping of internal noise.
- Water jacketed manifolds absorb exhaust noises.
- Modern design decreases flat external surfaces which act as sounding boards.

There is nothing finer in Heavy-Duty Diesels!



ENTERPRISE has cut "Noise Level" to a minimum —all parts hum smoothly, wear longer

Enterprise has gone far in taking the head-splitting noise and damaging vibration out of diesel operation. From base to manifolds, ENTERPRISE Diesels are carefully engineered and constructed to overcome harmful vibrational effects and noise—without sacrificing any of the famous ENTERPRISE high performance features. By all comparison, the resulting smooth operation is "quiet as a kitten." A low noise and vibrational level means less wear, lower maintenance cost, higher overall efficiency and economy.

This is but another of the many plus values enjoyed by ENTERPRISE customers the world over. Get all the facts... and your choice, too, will be ENTERPRISE.

Write for descriptive bulletins, or call your nearest ENTERPRISE *Diesel Sales office.*

Enterprise
DEPENDABLE
Diesels

ENTERPRISE ENGINE & MACHINERY CO.
18th & Florida Streets, San Francisco 10, California
A SUBSIDIARY OF GENERAL METALS CORPORATION

Boston · Chicago · Denver · Kansas City · Los Angeles
Minneapolis · New Orleans · New York · San Diego
San Francisco · Seattle · St. Louis · Washington, D.C.

DIESEL ENGINES • OIL BURNERS • PROCESS MACHINERY

Oyster Industry Discusses Quality and Sanitation

Boston is site of forty-sixth annual convention of oyster growers, dealers and shellfish research men

THE importance of providing the consumer with oysters which have been grown, harvested and processed under sanitary conditions was stressed at the 46th annual convention of the oyster industry at the Sheraton-Plaza Hotel in Boston, Mass., August 1-5. The joint meeting of the Oyster Growers and Dealers Association of North America, Inc. with the National Shellfisheries Association and Oyster Institute of North America, also heard reports on oyster spawning and setting studies, clam farming, a method of determining the best time to harvest oysters and the growth of the scallop fishery.

Elected to his third term as president of the Oyster Growers and Dealers Association was J. Richards Nelson of F. Mansfield and Sons Co., New Haven, Conn. Other officers of the Association, all of whom were re-elected, included Royal S. Toner of Lester & Toner, Inc., Greenport, N. Y., first vice-president; William P. Ballard, Ballard Fish & Oyster Co., Norfolk, Va., second vice-president; William M. McClain, William M. McClain, Inc., Philadelphia, Pa., junior second vice-president; and David H. Wallace of Annapolis, Md., secretary-treasurer.

The National Shellfisheries Association re-elected Dr. A. F. Chestnut as its president. Dr. Chestnut is shellfish specialist with the Institute of Fisheries Research, Morehead City, N. C. Prior to his election as president, Dr. Chestnut served two years as secretary and two years as vice-president of the Association.

Also re-elected as officers of the Shellfisheries Association were G. Francis Beaven of the Chesapeake Biological Laboratory, Solomons, Md., vice-president; and Dr. M. R. Carriker, Department of Zoology, University of North Carolina, secretary-treasurer.

The oyster conventiongoers selected Baltimore, Md. as the site for their 1955 meeting.

J. Richards Nelson, New Haven, Conn., left, re-elected president of the Oyster Growers & Dealers Association at its Boston, Mass. convention; and David H. Wallace, Annapolis, Md., secretary-treasurer of the Association.

Shellfish Certification Discussed by Wallace

"Oysters never have been produced of a better quality or packed under more sanitary conditions than is being done today." This statement was contained in the annual report by David H. Wallace, director of the Oyster Institute and secretary-treasurer of the Oyster Growers and Dealers Association of North America.

He continued: "The consumer is now able to buy oysters with little fear that they are not of the highest quality. This improvement has not come about in a haphazard way. It has been a result of the development of a plan started in the late 20's. This is the joint Federal, State and Industry program of shellfish certification. Probably no one single thing has been so important to the industry during the last 30 years as the implementation of this plan.

"What is shellfish certification? It signifies that shellfish being delivered to the consumer have been grown and processed under the most sanitary conditions. The standard equals that for the milk industry. It means constant checking of all waters by State officials to see that they are pure. It means consistent vigilance on the part of packers to keep their plants in a sanitary condition, and finally it means regular checks by the U. S. Public Health Service to determine that State authorities and plant operators are carrying out their part of the program.

"The result is shellfish certification. It is not spectacular; it is just an abbreviation of a State and a number on each package. But it is a signal to every housewife that she can purchase each such can or package with assurance.

"Shellfish certification is unique in the seafood industry, since it is a voluntary plan. There is no food industry in the country operating under such a system and probably none who have had less sanitation problems.

"During the past several months the U. S. Public Health Service has been working to develop a national conference including State health officers, their own shellfish sanitation personnel and the industry. We have been working with them to develop an agendum. The conference is scheduled for early September in Washington, and it will be of great interest to the industry.

"During the past year the Pacific oyster growers applied to the Food and Drug Administration for modification of their Standards of Identity. The regulations, under which their size categories were established, were outmoded be-

Some of the re-elected officers of the Oyster Growers & Dealers Association and one of the directors of the group. Left to right, Royal Toner, 1st vice-president; Baldo Pausina of New Orleans, a Louisiana director; William M. McClain and William P. Ballard, 2nd vice-presidents.

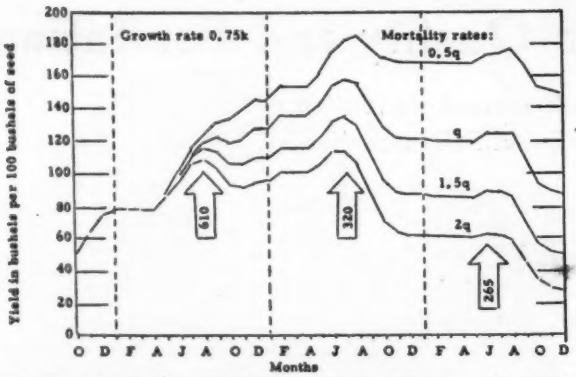


Figure 1—Hypothetical oyster yield curves, as discussed in the speech by Dr. J. L. McHugh, and based on a growth rate three-quarters as rapid (0.75k) as the rate in trays at the Gloucester Point, Va. laboratory, and at mortality rates equal to one-half, one, one and one-half, and two times (0.5q, q, 1.5q, and 2q) the rate in trays. The figures within the arrows represent the numbers of oysters per bushel, while the letters at the bottom of the graph represent the months.

cause of changes in processing and marketing conditions. The proposed new size groupings were clear, reasonable and practical. We presented a united industry to the Administration, and the regulations were adopted as proposed.

"The third Federal agency with whom we have had close relationships during the past year is the U. S. Fish and Wildlife Service. Our Government Relations Committee has met with the chief of the Branch of Fishery Biology and with the Director to discuss the shellfish research program.

"Our Board officially requested additional funds for oyster research on enemies and spawning and setting studies at their semi-annual meeting in January. There is every reason to believe some additional work will be forthcoming on these problems. A recommendation was made for study of the freezing technique of southern oysters in an effort to overcome excessive drip. Preliminary steps have been taken to effectuate this technological study.

"Conservation officials in most of the important States have been contacted in an effort to promote sound management programs on the public grounds. It is unfortunate that public grounds are being badly managed in many States. In some the production is only 10 to 20 per cent of what might be expected from the larger acreages and good quality bottoms. We have attempted to encourage the States to improve their culture technique in an effort to increase production.

Re-elected as officers of the National Shellfisheries Association, are, from left to right: Dr. A. F. Chestnut, president; G. Francis Beaven, vice-president; Dr. M. R. Carriker, secretary-treasurer.

"There is every indication that production is the real problem facing the oyster industry at this time. The planters, faced with severe mortalities from enemies, and in some cases from unknown causes, and with poor setting, are in a period of low production. The public lands, for various reasons, face the same situation. Most of our efforts have been directed toward development of research programs which might help to solve some of these problems and in the application of knowledge already available to improve cultural methods."

Determining Best Time to Harvest Oysters

The paper presented by Dr. J. L. McHugh, director of the Virginia Fisheries Laboratory at Gloucester Point, was concerned with how Chesapeake Bay oystermen can determine when to harvest their crops for the greatest yield in bushels of oysters. Dr. McHugh pointed out that, reduced to the simplest terms, the yield of market oysters from planted seed is determined by the interaction of growth and mortality.

He commented: "Drs. Andrews and Hewatt have been holding oysters in trays suspended from the Virginia Fisheries Laboratory pier for the past four years. The primary objective has been to study mortality rates, but other information has been gathered from time to time, particularly on the growth rate. During the course of these investigations we have been impressed by the yields that have been obtained, for it has not been uncommon to realize three bushels of market-sized oysters for each original bushel of seed placed in the trays."

He continued: "There seems to be good reason to believe that growth and mortality of oysters on planted bottom differ from the same rates in trays chiefly in magnitude rather than in seasonal pattern. Thus, curves showing the yield on planted ground at various levels of growth and mortality can be constructed by adjusting by appropriate factors the rates determined from tray culture. Such a series of curves, based on a growth rate ¾ as great as the rate in trays, is illustrated in Figure 1.

"It is worth noting that the maximum yield, unless mortality is exceptionally low, is reached about a year and a half after planting. If these oysters were not harvested until Fall, a mere three or four months after the maximum yield was reached, the yield would have fallen considerably, and although the Spring growth of the following year would cause the yield to increase again, it apparently never would reach the former level.

"Families of curves, based on various rates of growth and mortality, can be constructed readily. The oysterman can determine the rates characteristic of his grounds by methods described by Hopkins and Menzel (1952), and by selecting the appropriate curve, can determine when to harvest for the greatest yield in bushels of oysters.

"It would be of little benefit to the planter if he were to harvest his oysters at the point of maximum yield, only to find that the size was too small for economical shucking. The oysterman's criterion of size is the count per bushel, and it is useful to know the relationship between the average length, or average weight of oysters, and the bushel count.

"Several factors important to the oysterman have been ignored in the preceding sections. Perhaps the most important is the question: 'Are the oysters in prime condition at the time of maximum yield, and is the shucking ratio high?' The planter is perhaps better able than the biologist to answer this question.

"The producer also will be interested in the demand and the price, for he often may find it necessary to hold his crop past the point of maximum yield whether he wishes to or not. Some practical considerations such as the labor supply, will tend to force him to spread his operations over as many months as possible; others, such as the necessity to obtain high yields, favor a concentration of effort. Technological developments that would eliminate these conflicting pressures, such as the discovery of mechanical shucking methods and the development of quick-freezing processes, seem to offer the best hope for solution of these problems.

Left: "Comanche II", 65' oyster boat with capacity of 900 bushels, owned by R. A. Billups of H. K. Billups & Son, Mathews, Va. She has Caterpillar D17000 Diesel. Center: R. A. Billups, owner; Garland Hudgins, oyster plant foreman and Carroll W. Nuttall, captain of "Comanche II". Right: "Ruby Chrystal", 63' oyster boat with Caterpillar D13000 Diesel.

"Much more accurate information is necessary on the growth and mortality rates characteristic of planted bottom. It is hoped to get this information in two ways: by examining representative samples from planted grounds in various areas of the Bay and estuaries, and by experimental plantings of marked oysters.

"We hope also that some planters will be stimulated by these findings to examine our figures carefully. If our argument appears reasonable, we would urge them to experiment by harvesting at various time intervals. It goes without saying that for maximum results, such experimentation should be planned carefully and should be accompanied by careful and systematic recording. The Virginia Fisheries Laboratory will be willing and anxious to cooperate in such experiments."

Sanitation Control at Source

In his speech, Richard S. Green, chief, Shellfish Branch, Milk, Food and Shellfish Sanitation Program, U. S. Public Health Service, declared: "Few will deny that, in the case of shellfish (oysters, clams and mussels), a much greater degree of protection is afforded the consumer if sanitation controls can be based upon a sure knowledge of conditions surrounding the growing, harvesting, packing, and shipping of the shellfish instead of an objective examination of the final packages as received in the market. This principle of 'control at source' has been the basis of the Public Health Service and the State domestic shellfish programs."

Green pointed out that the effectiveness of this program may be judged by the low incidence of shellfish-borne enteric disease, in spite of the fact that health authorities have had to be concerned at all times over such problems as making sure that no shellfish are used from the more than 400 acres on the coast-line that are legally closed because of pollution.

Regarding foreign shellfish, Green declared: "Objective examination of samples collected from foreign shellfish shipments at the time of entry do not always give satisfactory evidence of sanitary conditions under which the shellfish were produced and packed. It is, therefore, difficult to decide which shipments should be admitted and which denied entry, particularly when bacteriological findings do not clearly show the presence of significantly large numbers of coliform organisms, and when other objective findings are satisfactory.

"Prior to World War II, few shipments of shellfish came into the United States except from Canada and Mexico. In the case of Mexico, most of the shipments were pismo clams, although an occasional shipment of shucked oysters was offered for entry. In 1952, somewhat over a half million pounds of clam meats were imported from Mexico, principally through the San Diego and Los Angeles ports of entry. In 1953, this figure was close to three-fourths of a million pounds. It is believed that almost all of these clams are used in production of heat-processed clam chowder; apparently, no attempt has been made to distribute the unprocessed clams beyond the State of entry, and thus the question of certification has not arisen.

"With the expansion of the frozen-food industry since the end of World War II, several other foreign countries have developed an interest in the United States as a market for bivalve shellfish, principally frozen clams. Japan, Iceland, Australia, The Netherlands, France, Spain, China and Panama have all exported or indicated an interest in exporting frozen clams, mussels or oysters to us.

"It appears that the total volume of shellfish shipped to the United States has been relatively small, somewhere in the neighborhood of one or two percent of our domestic production.

"It should be borne in mind, however, that all these shellfish, except those produced in Canada, have been faced with the restrictions resulting from lack of certification. There is no easy way to predict what the ultimate volume of shellfish imports might be if that situation did not exist.

"In the last few years, the governments of Japan and Iceland and of the Netherlands and Australia, also, have made known to the Department of State and to the Public Health Service their interest in working out some arrangements which would remove unnecessary restriction against the marketing of imported shellfish without endangering the public health. Therefore, various officials of the Department of State have developed a great interest in this problem, and the Public Health Service is being urged to expand the present system of certification to these and other foreign countries.

"The Service does not want its cooperative system of shellfish-sanitation control within the United States to act as an artificial trade-barrier against legitimate shellfish shipments which have been produced and packed under conditions equal to those required of our own packers. On the other hand, even if the Public Health Service had the authority to do so, there would be very great difficulties involved in extending this certification system to other countries.

"The application of our system of Public Health Service endorsement of over-all State programs presumes that representatives of the Service keep in fairly close touch with control efforts of the individual producing States by reasonably frequent consultations with State personnel, cooperative investigations, and check inspections. This reasoning has been applied even in connection with our agreement with Canada, which specifically includes provision for the exchange of information on methods of

Some of the directors of the Oyster Growers and Dealers Association. From left to right: James E. Munson, New Haven, Conn.; John L. Plock, Greenport, L. I., N. Y.; and Halfdan Andersen, Wickford, R. I.

production and handling of shellfish and for inspection visits across the border.

"There are no provisions in the Food, Drug and Cosmetic Act, under which the Food and Drug Administration operates, which would make possible any routine international exchange of information about techniques of sanitation control at source, much less provision for setting up any plan of international certification or endorsement of any foreign operating control program. In the view of officials of the Food and Drug Administration, the only justification for that Administration to use its appropriated funds to send a representative to a foreign country would be to gain information considered necessary for the proper enforcement of the Act in connection with foods or drugs offered for entry into the United States.

"Such visits have been rare for various reasons. In the first place, a single trip to a foreign country for inspection purposes only can develop information of limited usefulness. In order to carry out the type of inspections performed in this country under authority of the Federal Food, Drug and Cosmetic Act, it is sometimes necessary to visit one or more plants several times during the year. The obvious limitations of funds and personnel make such trips to foreign countries generally unproductive, as compared to the expenditure of comparable time and money in inspections in this country.

"We hope to develop a workable approach to the problem in time for it to be given full consideration at the forthcoming National Conference on Shellfish Sanitation, scheduled to be held in Washington on September 9th and 10th. This Conference, which is being called by the Surgeon General of the Public Health Service at the request of the Conference of State and Territorial Health Officers, will review all aspects of shellfish-sanitation control in the United States."

Shellfish Control Program in Canada

Shellfish sanitation as related to the export and import trade in Canada was discussed by J. R. Menzies, chief of the Public Health Engineering Division, Canadian Department of National Health and Welfare. He said: "An informal agreement exists between the U. S. Public Health Service and the Canadian Department of Health in regard to certification of shellfish producers. This agreement has been very helpful in the shellfish control program in Canada. It was formalized on April 30, 1948, and includes the following points:

1. Approval by both countries of a manual of recommended practice for sanitary control.
2. Each country agrees to report to the other the degree of compliance.
3. Both countries agree to facilitate inspections required by the other.
4. The agreement may be terminated by either country on 30 days notice.

"The Canadian Department of Health agreed to use the United States manual as a guide in assessing satisfactory compliance with accepted standards. Completion of the revised manual now being prepared by the U. S. Public Health Service is awaited with much interest. Our views were requested and have been considered. The list of shellfish shippers published in Washington has been used continuously in our control of imported shellfish."

Scallop Advertising Is Successful

An attitude of optimism for the future of the scallop and seafood industry was conveyed by John F. Linehan, general manager of the Seafood Producers Association of New Bedford, Mass. He outlined what has been done in New Bedford on a limited budget to advertise scallops, and disclosed that excellent results have been obtained.

Mr. Linehan pointed out the relative newness of the scallop fishery as an industry and the extreme lack of biological and technological research data. He stressed that the future of the scallop industry, like the oyster fishery, is in great part dependent upon the emphasis that is placed upon improved quality and advertising.

At the opening general session of the convention on August 3, speakers included Francis W. Sargent, director of the Massachusetts Division of Marine Fisheries, who discussed "Shellfisheries of Massachusetts", and Eugene T. Jansen of the U. S. Public Health Service, who talked on "The Development of Recommended Practices for Sanitary Control of the Breading and Freezing of Shellfish".

Topics discussed at the August 3 technical session included parasites of shellfish, the oyster drill and fungi in the sea. The speakers were Dr. William H. Weston, Harvard University; Dr. J. D. Andrews, Virginia Fisheries Laboratory; H. C. Davis and Dr. V. L. Loosanoff, Fish & Wildlife Service Laboratory, Milford, Conn.; Sammy M. Ray and Dr. J. G. Mackin, Rice Institute and Texas A. and M. College; R. Winston Menzel and Dr. S. H. Hopkins, Texas A. and M. College; Harold Loesch, Alabama Department of Conservation; and Dr. Melbourne R. Carriker, University of North Carolina.

Symposium on Oyster Setting

Dr. Thurlow C. Nelson, biologist with the New Jersey Division of Shellfisheries and Professor of Zoology, Rutgers, was among those participating in the symposium on oyster setting. His topic was: "Observations of the Behavior and Distribution of Oyster Larvae".

Dr. Nelson stated: "Since the brackish water zone most favorable to the oyster's existence is rather sharply limited, it follows that within the 60 odd million years during which our oyster has existed on this earth its young stages have developed reactions which bring enough of them back into this limited zone at the end of their free existence to maintain the species. To the biologist this means that selection has favored the perpetuation of those larvae which behaved in such a manner as to return them close to, or upstream of, the ancestral home from which they departed two weeks earlier.

"To the practical oyster grower it means getting his shells overboard at the right place and as close as possible to the time of setting in order to avoid excessive fouling of the shells with other organisms. With definite limits on equipment and manpower available for planting often many thousands of bushels of shells, the grower is usually forced to ignore the dangers of fouling, trusting that some portion of the majority of his shells will be clean enough to catch at least a few spat. The American oyster grower is quite aware of the losses he suffers through fouling of shells and certainly would welcome economically practicable means of reducing or avoiding this.

"Korringa has been quite successful in Holland through the use of D.D.T. in preventing the attachment of two of the most objectionable fouling organisms in his area, barnacles and hydroids. Cement covered roofing tiles used to collect spat by the Dutch oyster growers are given a bath in D.D.T. emulsion with oil and water in such concentration that each tile bears approximately 15 milligrams of D.D.T. when planted. Translated into more easily understood terms this means approximately an ounce of D.D.T. to 1900 roofing tiles, an amount which apparently is not toxic to oysters.

"British investigators at the Fisheries Experiment Station at Burnham on Crouch, however, report little success

(Continued on page 32)

New Trawler "Capt. Hazard" Joins Texas Shrimp Fleet

Vessel is third shrimper built by Louisiana shipyard at new location

VETERAN boat builders Cunningham and Pitre recently launched their third shrimp trawler at their shipyard on the banks of the Delcambre Canal in Delcambre, La. Both men admit they have been building boats for more years than they care to count, having had their shipyard at Lafayette, La. on the Vermilion River before locating in Delcambre nearly a year ago.

Quentin J. Cunningham, the Cunningham half of the team, admits being a boat builder for some 40 years. Elie J. Pitre, the other half of the team, says he built his first boat, a sort of plank affair, at the age of 12. Then he adds: "All my family are carpenters." Although the know-how of building boats obviously takes more than the knowledge of carpentry, it is a well known fact that the oldest and some of the best boat builders did not go to school to learn the trade. It was passed down from father to son, as in the case now with Mr. Cunningham's son, who is still a very young man but was on the job doing his share of fashioning the trawler *Capt. Hazard.*

This 65' x 19' shrimper was launched on July 1 for her two youthful owners—E. J. and Loua Segura of Delcambre, La. She will be skippered by the boys' father, Capt. Hazard Segura, and will operate out of Brownsville, Texas. Designed by Cunningham and Pitre, the *Capt. Hazard* has a fish hold capacity of 38 tons. She has bunks for three men in the pilot house.

Power for the new vessel is furnished by a 150 hp. Murphy Diesel. The engine turns 46 x 38, four-blade Michigan propeller on 3" Monel shaft through 3:1 Twin Disc reduction gear, giving the boat a speed of 11 mph.

Other equipment on the *Capt. Hazard* includes Fairbanks-Morse generator, Jabsco pumps, 32-volt Southland batteries, Stroudsburg hoist, Northill anchor, Perko foghorn, C-O-Two fire extinguishers and Linen Thread nets.

The engine is fueled and lubricated with RPM products. Cordage is of Plymouth manufacture, wire rope is from Union, and the new boat is finished with Pettit paint.

The first boat to slide down the ways at the Delcambre yard of Cunningham & Pitre was the *Capt. Danny,* a 63' x 18' standard type shrimp trawler. She is owned and skippered by Capt. Enus Segura of Delcambre, and was launched in March of this year. Cypress 2" planking was used inside and out on this boat.

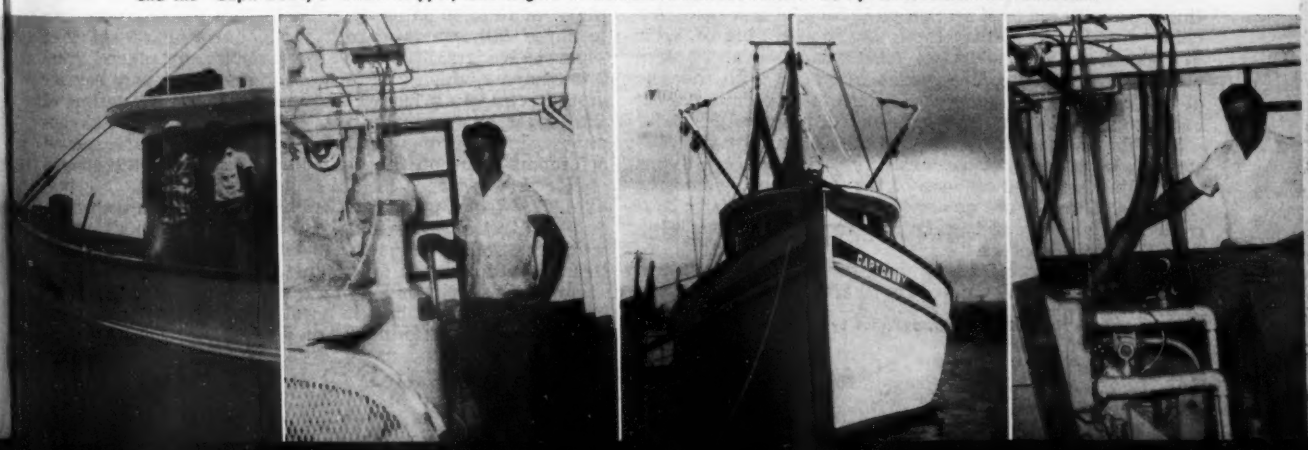
The *Capt. Danny* is powered by a 6-71 General Motors 165 hp. Diesel with 4½:1 reduction gear which gives her a speed of 11 mph. There is a Michigan propeller which turns on 3" Monel shaft. The auxiliary engine is by Briggs and Stratton, and other equipment includes Fairbanks-Morse generator, Jabsco pumps, 32-volt Gould batteries and Foamite fire extinguishers.

The fish hold on the *Capt. Danny* has a 32-ton capacity, and there is a Stroudsburg hoist. Navigation equipment includes General Electric direction finder and radiotelephone, as well as Bendix depth finder. Cordage is by Plymouth, and anchors are of Northill manufacture. The *Capt. Danny* uses RPM lubricating oil, Union wire rope, and is finished with Pettit paint. She sleeps 3 in the pilot house.

The new 65' shrimp trawler "Capt. Hazard", designed and built by Cunningham & Pitre of Delcambre, La. for Loua and E. J. Segura of Delcambre.

The galley of the "Capt. Hazard", showing the mahogany finish.

Left to right: E. J. and Loua Segura of Delcambre, La. on the deck of their 65' shrimper "Capt. Hazard"; Loua Segura beside the 150 hp. Murphy Diesel on the "Capt. Hazard"; the 63' shrimper "Capt. Danny", first boat to slide down the ways at the Delcambre yard of Cunningham & Pitre; and the "Capt. Danny's" owner-skipper, Enus Segura of Delcambre with the vessel's 165 hp. General Motors 6-71 Diesel.



Pacific Salmon Troll Fishery Has Grown Rapidly

*Operations are carried on all along the coast from Central California to Southeastern Alaska by One and Two-Man Boats**

IN the fifty years following the discovery that king or chinook, and silver or coho salmon would strike a moving lure or bait, trolling has developed into one of the most extensive fisheries on the Pacific Coast. It now extends from Central California to Southeastern Alaska, and during recent years has involved as many as 3,400 United States trolling craft.

Probably the most important reasons for this phenomenal growth are the sporting nature of the fishery, the relatively independent life led by the troll fishermen, the fact that effective operations can be conducted either by an individual or, at most, a crew of two, and the fairly dependable financial return from the comparatively small investment required to outfit and operate a boat.

Essentially, troll fishing involves the use of a moving lure or baited hook at a desired depth in the water. Commercial trolling craft vary considerably in size and design, but the usual length is from 30 to 60'. Whereas the earlier craft were generally of a double end design, i.e., both the bow and stern pointed, the recent trend has been toward the horseshoe type stern. Irrespective of size and design, however, a trolling craft always can be identified by the long upright poles which are used to keep the lines clear of the boat.

The main poles, set amidships, are normally about the same length as the boat, while the bow poles are from 10 to 12' shorter. Formerly it was the practice to fasten the poles to the base of the foremast and mainmast respectively. However, modern trolling boats have dispensed with the foremast, and the main poles are fastened in a bracket on the gunwale. The brackets are ¼ to ⅜ galvanized steel plate or cast bronze. Poles are of spruce, cedar, or fir, tapering from a 4 to 5" diameter at the butt, to about 2" at the tip. They usually are treated with linseed oil and painted.

When not in use each of the main poles rests in a groove at the end of the crosstree on either side of the mainmast. This crosstree is set 2 or 3' below the top of the mast. The bow poles are laid aft and rest in spring clamps on the crosstree or stand upright in their brackets with the aid of the guy lines. The bow poles are guyed forward on or just behind the stem and aft on the outside of the gunwale. The main poles have two guys forward and one aft.

The guy wires are 5/16 inch 1 x 7 galvanized steel. A ⅜ or ½ inch line runs from each pole through a 4-inch diameter pulley at the crosstree to raise and lower the poles.

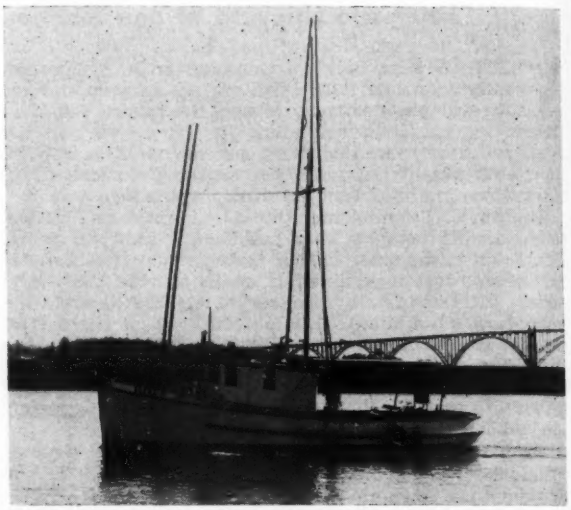
Trolling Gear

Trolling gear consists of three main sections:

1. *A tag line,* which is fastened a few inches from the tip of the trolling pole by a double seizing. The tag line is made up of a ½" manila line of about 2' in length, a heavy duty corkscrew swivel, a 1/16 to ¼" stainless tag line wire with a 6 to 9' section of ¼ to ½" brass pear-link chain, a 12" long leather thong or breaker line of ½ to ¾" rawhide, and a nickel silver line clamp (metal clothespin). The tag line varies in length with the size of the pole, but the general measure is to permit partial exposure of the pear-link chain at trolling speed.

2. *The main trolling line,* which is usually of 1/16" stainless or bronze twisted wire. From 100 to 150 fathoms of this line is wound on each of the gurdy spools, one for each line. Gurdies are power reels each individually controlled by a clutch and brake and are made in sets of 2, 3, and 4 reels or spools.

Power for the gurdies is derived through a take-off and shaft from the main engine. The shaft is connected to an ordinary automobile transmission either by a V-belt or sprocket chain, and the gurdies take off from the transmission. In recent years there has been a trend toward the use of electric motors and hydraulic drives for gurdy power. This latter type also can be adapted to provide reverse as well as direct action.



The "Elena N.", a 45' salmon troller owned by Capt. Buck Burns of Bar View, Ore., shown at Newport harbor. She was built in 1947 and is equipped with a 140 hp. Gray gasoline engine, Raytheon Fathometer, Northern telephone and direction finder, Photo Electric Pilot, Olympic range and Northill anchor.

The trolling wire or line is run vertically from the gurdy spool through a 4 to 6" bronze block suspended overhead and thence across to another block on a davit. This davit is usually of 1 to 1½" galvanized steel pipe construction high enough to permit freedom of movement for the fisherman and extends at least to, or shortly beyond, the gunwale of the craft. The fisherman stands in a cockpit on the stern of the boat where he has a steering wheel, throttle, and gurdy controls.

In fishing, the poles are set out at an angle of about 50° from the mast, and the trolling line is let out by releasing the brake on the individual reel. The fishing line, when in operation, is attached to a cannon ball type sinker. For the main lines an 18 to 22 pound sinker is generally used, whereas a 40 to 50 pound sinker is usually used for the bow lines.

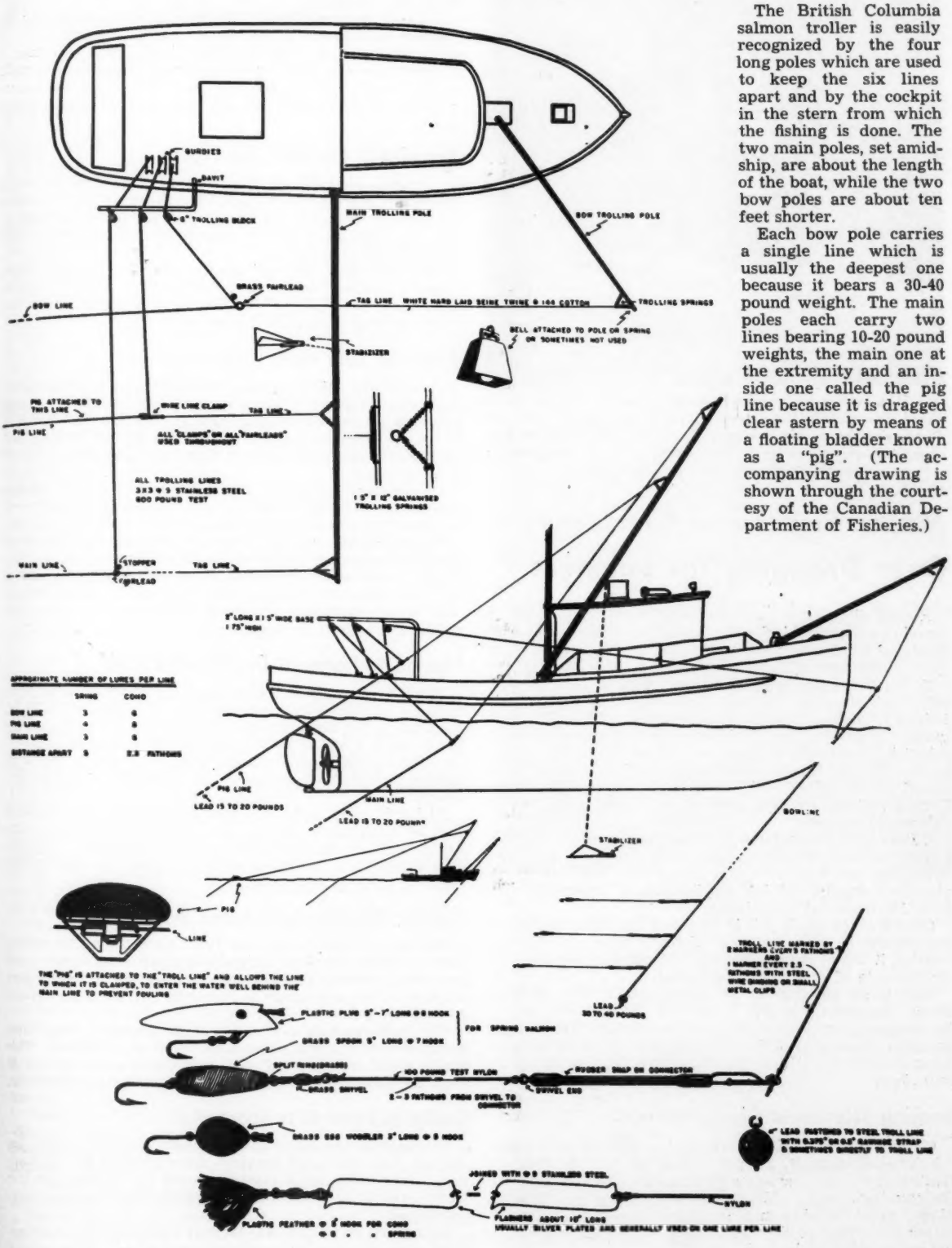
On the main line and starting slightly above the one fathom mark from the sinker, paired line stops or wrappings, of 18 to 20 gauge Monel wire, are placed every two to three fathoms to permit the connecting of up to 8 separate leaders. The line stops are usually placed from 2 to 3" apart which will form an upper and lower barrier at the connecting leader, thus permitting free action of the leader but controlling its position. Additional wrappings, generally of 9-ply linen salmon twine, are spaced 5 fathoms apart on the main line to measure the length of line that has been let out.

3. *The leaders* consist of a 5" snap on connector, a moulded trolling rubber or rubber tubing of about 14", a small corkscrew connector, 2 or 3 fathoms of 21 to 24 strand braided nylon cuttyhunk, another corkscrew connector, and an eye or loop on a stainless steel leader 3 to 5' in length. When bait is used, a number 9 or 10 (flat

(Continued on page 48)

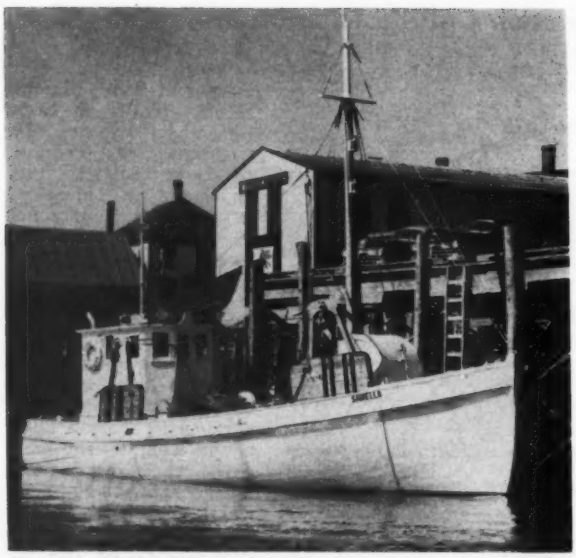
*Excerpted from Fishery Leaflet 387, published by the U. S. Fish & Wildlife Service, Washington 25, D. C.

British Columbia Salmon Trolling Gear


GURDIES
DAVIT
8" TROLLING BLOCK
MAIN TROLLING POLE
BOW TROLLING POLE
BRASS FAIRLEAD
BOW LINE
TAG LINE WHITE HARD LAID SEINE TWINE 6 18s COTTON
TROLLING SPRINGS
BELL ATTACHED TO POLE OR SPRING OR SOMETIMES NOT USED
STABILIZER
PIG ATTACHED TO THIS LINE
WIRE LINE CLAMP
TAG LINE
PIG LINE
ALL "CLAMPS" OR ALL "FAIRLEADS" USED THROUGHOUT
ALL TROLLING LINES 3 X 3 X 3 STAINLESS STEEL 600 POUND TEST
1 5" X 12" GALVANIZED TROLLING SPRINGS
MAIN LINE
STOPPER
FAIRLEAD
TAG LINE
APPROXIMATE NUMBER OF LURES PER LINE
SPRING
COHO
BOW LINE 3 6
PIG LINE 4 8
MAIN LINE 3 6
DISTANCE APART 5 2.5 FATHOMS
LEAD 15 TO 20 POUNDS
MAIN LINE
LEAD 15 TO 20 POUNDS
STABILIZER
BOWLINE
PIG
LINE
THE "PIG" IS ATTACHED TO THE "TROLL LINE" AND ALLOWS THE LINE TO WHICH IT IS CLAMPED, TO ENTER THE WATER WELL BEHIND THE MAIN LINE TO PREVENT FOULING
PLASTIC PLUG 5"–7" LONG 6 HOOK
FOR SPRING SALMON
BRASS SPOON 5" LONG 7 HOOK
SPLIT RING (BRASS)
100 POUND TEST NYLON
RUBBER SNAP OR CONNECTION
BRASS SWIVEL
2–3 FATHOMS FROM SWIVEL TO CONNECTION
SWIVEL END
TROLL LINE MARKED BY 2 MARKERS EVERY 5 FATHOMS AND 1 MARKER EVERY 2.5 FATHOMS WITH STEEL WIRE BINDING OR SMALL METAL CLIPS
LEAD 30 TO 40 POUNDS
BRASS 000 WOBBLER 3" LONG 5 HOOK
LEAD FASTENED TO STEEL TROLL LINE WITH 0.375" OR 0.42" GARMOND STRAP SOMETIMES DIRECTLY TO TROLL LINE
JOINED WITH 9 STAINLESS STEEL
NYLON
PLASTIC FEATHER 6 HOOK FOR COHO 6 SPRING
FLASHERS ABOUT 10" LONG USUALLY SILVER PLATED AND GENERALLY USED ON ONE LURE PER LINE

The British Columbia salmon troller is easily recognized by the four long poles which are used to keep the six lines apart and by the cockpit in the stern from which the fishing is done. The two main poles, set amidship, are about the length of the boat, while the two bow poles are about ten feet shorter.

Each bow pole carries a single line which is usually the deepest one because it bears a 30-40 pound weight. The main poles each carry two lines bearing 10-20 pound weights, the main one at the extremity and an inside one called the pig line because it is dragged clear astern by means of a floating bladder known as a "pig". (The accompanying drawing is shown through the courtesy of the Canadian Department of Fisheries.)



The 51' x 16½' x 5½' dragger "Samella", owned by Sam Guptill of Grand Manan, N. B. She is powered by a General Motors Series 110 Diesel, and has an Edo Fishscope. The vessel, which was built by George Richardson and Son of Deer Island, N. B., is shown tied up at the Wadsworth Wharf in Eastport, Me.

Maine Fishermen Concerned Over Dragging for Lobsters

Recent disclosures by a Portland lobster dealer that a vessel operated by his firm has made three successful trips dragging for lobsters some 90 miles at sea have created quite a stir among Maine's fishermen.

So far there has been little agreement as to just what effect this development may have on the state's lobster industry. Lobstermen in the Portland area have been quoted as fearing that indiscriminate offshore dragging might have a bad effect on the inshore supply on which most of Maine's lobstermen depend. Yet biologists of both the Fish & Wildlife Service and the Sea & Shore Fisheries Department agree that at present there is no evidence that this would happen.

Others have suggested that should deep-water dragging attract a large fleet of vessels, thus becoming a sizable operation, the market might be glutted with an overabundant supply, driving the individual fisherman with 50 or 100 traps out of business.

On the other hand, if it is true that the offshore lobster population is separate and distinct from its inshore cousins, it would seem to be wasteful not to make the best use possible of such untapped resource.

Size is an element to be considered in the offshore catch. Apparently nearly a third of the lobsters caught by dragging are larger than the maximum legal measurement allowed in Maine. These must either be thrown back or landed in Massachusetts where there is no maximum law.

Seeking Solution to Clam Shortage

Maine's soft-shell clams are getting scarcer, and Commissioner Stanley R. Tupper stated last month that the lion's share of the blame for the shellfish shortage rests on the growing number of local laws prohibiting non-resident diggers from working on closed flats. Tupper said he plans to ask for repeal of all "home rule" clam-digging laws at the next session of the legislature.

Statistics collected by his department show that clam production statewide has dropped steadily since 1949 from over 8 million lbs. to less than half that amount in 1953.

Robert L. Dow, head of the research branch of the department, lists the green crab as one of the causes of the shortage, with other factors being unwise digging practices and breakage.

Tupper believes that a program of surveys should be started, and if the studies show that in the interests of conservation clam flats should be closed, then this should be done. At the same time, conservation measures could be outlined to the diggers, and up-to-the-minute data compiled by other department surveys could be made available.

Big Month for Birds Eye Fleet

Landings at the Birds Eye Division of General Foods in Rockland reached nearly 3,500,000 lbs. during the month of July, to make the month the best for the year to date. The landings were almost entirely redfish, with only 500 lbs. of halibut included.

Highline boat for the month was the *Ocean*, Capt. Ronald Whiffen, which landed 503,900 lbs. Other boats to land more than 400,000 lbs. during the month were the *Calm*, *Storm*, *Wave*, *Crest* and *Drift*.

Fisheries Men Meet with Governor

Gov. Burton M. Cross and Sea & Shore Fisheries Commissioner Stanley R. Tupper met at the McKown Point research station on August 18 with members of the Sea & Shore Fisheries Advisory Council, David Rutherford of Bath, Kenneth C. Gray of Boothbay and Mr. Olson of Cape Elizabeth.

Gov. Cross emphasized to the group his interest in the procurement of an artificial lobster bait, and continued study of this important subject, aided by federal research.

There was also group discussion about the net effect of offshore dragging on the inshore lobster industry. Mr. Tupper said that only one vessel is now operating and is at work some 100 miles at sea. He made it clear that if any danger to inshore lobstering should develop from this offshore dragging, he would seek protective legislation.

Named to Fisheries Department Staff

Sea & Shore Fisheries Commissioner Stanley R. Tupper recently announced the appointment of biologist Malcolm Richards to the research staff of the Sea & Shore Fisheries Dept. He is a Maine native, a graduate of Boston University and recently has been carrying on research work at Harvard University sponsored by the Office of Naval Research.

Richards will make his headquarters in the western part of Washington County, and his activities in the near future will be concentrated on conducting clam population surveys and working with the towns in developing shellfish management programs.

Smoked Mussels Introduced by Snow

The F. H. Snow Co. of Pine Point recently introduced a new product—smoked mussels—perhaps the only such product processed in this country. Even the olive oil that surrounds the appetizers is "smoked" at the Gouldsboro plant in Frenchmen's Bay.

The best mussels are raked with grapples from low water where the shells are submerged all the time. The Maine coast is blanketed with mussels to such an extent that the bivalves have usurped much good clam territory.

Seafoods Festival Is Successful

The eighth annual Maine Seafoods Festival ended on August 8 as memorial services were held at the Fishermen's Pier. The giant lobster cooker performed for the three days with an estimated 20,000 lobsters having been consumed.

George A. Robinson, 94, Maine's oldest active lobsterman, was the honorary parade marshal and rode ahead of two of Maine's youngest trap-pullers, Frank Cushing, Jr. of Cliff Island, Portland, and Tommy Painter of Winslow and Owls Head, both of whom are 7 years old.

Three Hundred Shrimpers Are Blessed at Delcambre

"Master Brian" is lead boat in Louisiana celebration

BENEATH the brilliant rays of the August sun an impressive ceremony was celebrated in the little fishing village of Delcambre, La. on Sunday, August 15, when some 300 shrimp trawlers lined both sides of the man-made deepwater channel that leads directly to the fishing grounds of the Gulf of Mexico. The ceremony was the age-old custom of the blessing of the fishing boats before they left for the shrimping season just opened by the Louisiana Conservation Commission.

Mingled with the solemnity of the occasion was the irrepressible gaiety of the throngs of Latin and French villagers and their hundreds of guests. If one were lucky he obtained an invitation to ride in the parade of decorated boats as they followed the lead boat *Master Brian,* owned by Capt. Herman Broussard of Delcambre, La., on her mission up and down the waterway. The Right Reverend Monsigneur Paul Fuselier of the St. Mary Magdalene Catholic Church of Abbeville, La. intoned the blessing upon each and every fishing craft and the families who were aboard the boats.

The deeply-religious fisherfolk who derive their living from the sea have faith that this religious service will obtain for them a bountiful catch throughout the season and keep them from all harm at the same time. The picture made by the Right Reverend Monsigneur in full vestments as he raised his hand in blessing each boat, surrounded by his assistants and black-and-white clad altar boys, was a never-to-be-forgotten sight.

Royalty on "Miss Trinity Shoal"

Closely following the lead boat *Master Brian* with its load of priests, altar boys and the Holy Altar came the *Miss Trinity Shoal,* owned by Capt. Harold Barras of Delcambre, with the King and Queen of the Fourth Annual Shrimp Festival aboard. The King was Dr. A. Landry of Delcambre, 75-year-old physician to the entire population of the village for many years. Miss Lois LeBlanc of Erath, La. was Queen.

The *Miss Trinity Shoal* is a 73' deluxe shrimp trawler which was completed by Conrad Industries of Morgan City, La. just in time for the Festival. Capt. Harold Barras brought her to the celebration for the purpose of entering the parade and the festivities of his home town. She will work out of the home port of Brownsville, Texas.

The outside planking of the *Miss Trinity Shoal* is 2" mahogany, while the inside is 2" pine. The living quarters are finished in mahogany with inlaid linoleum on the floors. Formica cabinet and table tops add a luxurious note.

The mast of the new shrimper is 10" steel all-metalized, while the boom is 6" steel, with ⅞" rigging. The inside of the ice compartment is sealed with aluminum foil and 4" Fiberglas insulation. The *Miss Trinity Shoal* has a 500-gallon fresh water tank, a light plant, and bunks for 4 men.

Power for Capt. Barras' new trawler is furnished by a 205-hp. General Motors 6-110 Diesel turning 4-blade Doran propeller. Batteries are Southland, and bilge pumps include 1½" centrifugal Fairbanks-Morse and 1½" Jabsco driven by front power take-off. Fuel capacity of the new trawler is 4,000 gals.

Metal Marine automatic pilot, 8" Ritchie compass and DR-7A Bendix depth recorder make up the navigating equipment on the *Miss Trinity Shoal.* There is a 515½ Stroudsburg hoist.

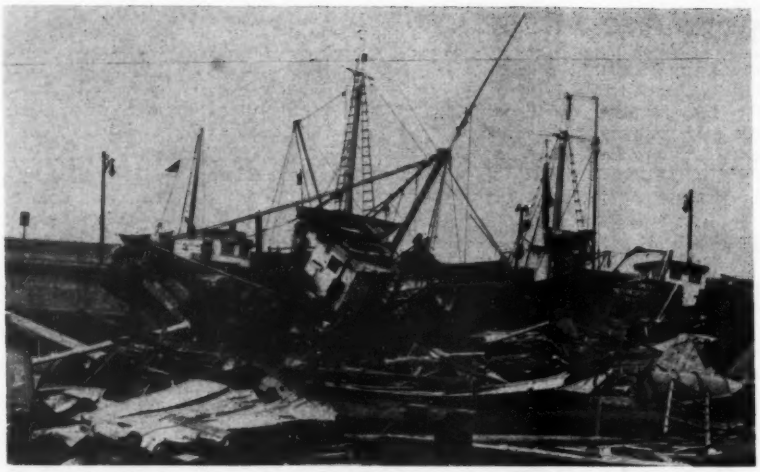
International paint was used inside and out on the new shrimper.

The Right Reverend Monsigneur Paul Fuselier blessing the shrimp trawler "Nightingale" at Delcambre, La.

Capt. Herman Broussard's "Master Brian" leading the water parade.

On board the "Miss Trinity Shoal" of Brownsville, Tex. Front row, left to right: Dr. A. Landry of Delcambre, La., King of the Shrimp Festival; his Queen, Miss Lois LeBlanc of Erath, La. In the second row are, left to right: Allan LeBlanc of Delcambre, La., president of the Shrimp Festival and Fair Association; Miss Betty Baquet of Breaux Bridge, La., 1st maid to the Queen; Harold Barras of Delcambre, owner of "Miss Trinity Shoal"; Miss Dorothy Migues, Delcambre, 2nd maid; Pershing Cashen, member of Shrimp Festival Board of Directors.

"Miss Trinity Shoal", owned by Capt. Harold Barras of Delcambre.



Some of the Fairhaven, Mass. fishing boats which were wrecked or damaged by the hurricane.

New England Fishing Fleet Damaged by Hurricane

One New Bedford scalloper goes down during storm with all hands, and many draggers are damaged or sunk at docks

FISHING fleets in Maine, Massachusetts, Rhode Island and Connecticut were hard hit by hurricane Carol which left wreckage in its path all along the coast of the four States.

In Maine, lobstermen were the heaviest losers, and according to Chief Coastal Warden Ronald Green, it is estimated that one-half of the lobster traps from Kittery to Bar Harbor were lost. Maine has 5,700 licensed lobstermen with an average of 110 traps each. The storm, coming as it did when lobstermen were working close inshore, wreaked havoc with the strings of practically all fishermen.

Loss is estimated to be in excess of two million dollars in traps, pot warp, buoys and toggles, as well as small boats. A number of skiffs and dories were lost, but only two or three instances of damage to lobster boats were reported.

In Rockland harbor, the commercial fishing fleet escaped damage. The big trawlers went into the outer harbor as the storm increased and rode it out through the day and night.

Boston and Gloucester Fleets Battered

The Boston fishing fleet was wracked by the hurricane. With 35 of the fleet tied up at the docks three and four abreast, the excessive tide and heavy winds banged and battered the boats.

Among those reported damaged were the trawlers *Bonnie Billow, Rosa B., Patty Jean, Jane B.,* and the *J.B., Jr.* They all suffered smashed rails and other damage, estimated as high as $10,000 in all.

The Gloucester fishing fleet escaped with little damage, riding out the hurricane and the terrific high tide. The tide was of such tremendous height that the water was level with the wharf surfaces for the entire length of the waterfront.

New Bedford and Fairhaven Hard Hit

Hurricane damage to Fairhaven's waterfront, particularly to buildings on the town's wharves and to vessels, was unofficially estimated at $3,000,000.

More than 25 vessels, including large fishing craft, were submerged along the town's 2-mile waterfront area. Apparently heaviest hit of the Fairhaven wharves were those of the Peirce and Kilburn Corp., and the Hathaway-Braley Wharf. At the Hathaway-Braley Wharf alone, three fishing vessels sunk, including the *Palmico,* from Wildwood, N. J.; and the dragger *Jimmy Boy;* and an unidentified dragger.

In addition, the following vessels were half-submerged or aground on the wharf proper: *Whaling City, Sister Alice, New Dawn, Pauline H.,* all draggers.

At Peirce and Kilburn's boat yard, several sheds were leveled and more than 10 vessels were grounded, half-submerged or sunk.

Fairhaven's Union Wharf was also the scene of much devastation. The fishing vessels *Dagny* and *The Friars* were sunk and the vessel *Aloha* was sunk off D. N. Kelley & Son, Inc. More than 15 vessels were washed ashore by the waves on the two wharves. Damage, it was reported, will exceed more than $100,000 each at Union and Kelley wharves.

Fairhaven's worst scene of havoc was the small beach area immediately behind the Skipper Restaurant at the foot of the Fairhaven side of the Fairhaven-New Bedford bridge. There, wreckage of more than 20 vessels of various sizes and types can be seen. Included are the fishing vessels *Mary J. Landry, Julia K.* and *J. Henry Smith.* Within the small basin-like area are three sunken vessels, apparently draggers or scallopers.

Boat wreckage found recently by Coast Guardsmen in the vicinity of Nantucket Shoals has been identified positively as that of the 83' New Bedford scalloper *Redstart,* which was lost at sea in the hurricane. The vessel's crew of 11 men are presumed dead. Skipper of the *Redstart* was Capt. Braz M. McDonald, and the boat is owned by Michael Smith of South Dartmouth, who was not aboard.

A spectacular rescue was performed by Capt. Sofus Mortensen and the crew of the New Bedford dragger *Jacintha* near the entrance to Buzzards Bay, nine miles southwest of Noman's Land. They saved the entire crew of the *Friendship II* at the height of the storm by means of a life raft rigged between the two vessels.

At Provincetown, the majority of the fishing fleet successfully rode out the high winds at their harbor moorings. However, fish traps in the harbor sustained serious damage. Many poles were blown off and some traps were lost. Trap boats and scows were extensively damaged.

Committee To Discuss Emergency Aid

Governor Herter's labor-management committee to promote Massachusetts fishing industry was to hold a special meeting at the State House on September 8 to determine emergency ways and means of refloating and repairing Massachusetts fishing vessels hit by the hurricane. A preliminary survey of the Bay State lobster fleet indicates widespread loss and damage to boats and almost a total loss of lobster gear in the coastal waters.

However, according to Francis W. Sargent, director of the Division of Marine Fisheries and chairman of the Governor's committee, the destruction to the draggers and sea scallopers in the New Bedford and Fairhaven areas was the most serious blow. Between 60 and 65 vessels either were sunk, damaged or driven ashore.

At the request of Governor Herter both the Navy and the Coast Guard are giving priority assistance to fishing vessels in the southeastern Massachusetts area where efforts are being made to obtain cranes, salvage crews and divers. The fishing industry in the disaster area is eligible for long-term loans from the Small Business Administration, and, based upon need, fishermen may apply for Red Cross assistance from the local field offices. It has been learned that a temporary office of the Small Business Administration has been set up in New Bedford to expedite disaster loans.

(Continued on next page)

Rhode Island Fishermen Lose Boats and Gear

In Rhode Island, trap fishermen and other boat owners in Tiverton and Little Compton lost nearly $300,000 in boats and gear. Gilbert Manchester, commercial fisherman, found his pier and three fishing boats gone when he was able to get over a 40-ft. ditch washed out by the floods. Other fishing craft losses were heavy, and missing from the harbor were a 34 ft. lobster boat owned by Edgar Larkin and a 24-ft. bass boat owed by John Goulart.

Stonington, Conn. Industry Badly Damaged

In the Connecticut area, damage to the Stonington dragger fleet and fish shipping stations was estimated at more than a million dollars. In addition to the large draggers, some 10 lobster boats were washed onto dry land and at least eight of those were believed to be beyond repair.

Under water were the dragger *Carol and Dennis*, Capt. Denny Cidale, which sank at the Bindloss Marine Station dock, and Capt. Alfred Rebello's *Mary A.*, which sank at Longo's dock. Salvage efforts being directed at the *Carol and Dennis* indicated that the dragger can be repaired, but that the *Mary A.* probably will not even be raised. Driven onto dry land were the *Private Frank Kessler, Lisboa, Fairweather* and *Bette Ann.*

Longo's shipping shed was virtually a total loss, and the amount of damage there is expected to run into hundreds of thousands of dollars. Trailer trucks used to ship fish were overturned by the high seas, and many will not be used again. Tony Longo, owner, said steps are being taken to provide temporary piers to ship out fish.

Examination of the Long Island Sound oyster grounds the day after the hurricane by the staff of the Milford Fish and Wildlife Service Laboratory and reports received from a number of oyster growers indicated that the damage to the oyster beds was comparatively light. The 1953 oyster set in the Bridgeport area suffered practically no damage.

New Bedford Fisherman Gets Patent on Scallop Drag

Andrew Olden, a New Bedford fisherman, has received patent rights from the Federal Government for a scallop drag which allows the net to be free to closely follow the contours of the sea bottom, increasing the yield scooped into the net.

Mr. Olden's device comprises a frame, supported by properly positioned shoes so that it rests about 3 to 4" above the bottom. The net is secured to the frame. Mounted in front of the latter are one or more downwardly-inclined plates, which not only assist in holding the mechanism against the sea bottom, but also are designed so that a suction is created by the passing water to stir the scallops and allow the shellfish to pass more readily into the net.

The agitating action is aided by a chain located in front of the net which assists in keeping out large rocks. When the drag is full of scallops it can be lifted to the boat deck and emptied by manipulating a back-positioned dump chain.

"Gertrude D." Lands Big Sword Trip

Capt. Horace Devine, owner of the *Gertrude D.* of Oak Bluffs, landed 116 swordfish August 2 at the port of New Bedford in one of the largest hauls of the species to be sold through the auction room at Pier 3.

The fish averaged about 200 lbs. each, one tipping the scales at 337 lbs. The catch sold for 28.80¢ per pound.

"Mary Canas" Sinks

The 61' New Bedford scalloper *Mary Canas*, skippered by Capt. Alphonse Amiro, sank August 2 in 50 fathoms of water 160 miles east of Pollock Rip Lightship. Her 11-man crew was taken aboard the scalloper *Moonlight.*

Outboard-powered scallopers at work near Stonington, Conn.

"John David" Being Repowered

The Provincetown dragger *John David*, owned and skippered by Capt. John Russe, is being repowered with a 275 hp., 6½ x 6½ turbocharged Wolverine Waukesha Diesel at the Hathaway Machinery Co. in Fairhaven. The engine is equipped with Snow-Nabstedt 3:1 reduction gear and Westinghouse Tridyne controls.

Overhauling and Refitting

Capt. John Murley's dragger *Teresa and Jean* is at D. N. Kelley and Son, Fairhaven, for a complete paint job with International paint. She also is having iron and wooden sheathing, new foremast rigging and her stern is being rebuilt.

The *Mocking Bird*, owned by A. F. Amory & Son of Phoebus, Va., has been hauled out at Kelley's for new stern bearing and propeller repairs. She has been redfishing out of Rockland, Me., and is en route to Virginia. The *Ursula M. Norton, Catherine and Mary* and the *Flamingo*, owned by Ike Norton of Vineyard Haven, are having general overhauls at Kelley's before Fall fishing.

A Wilfrid O. White & Sons SurEcho depth sounder has been installed on the New Bedford dragger *Barracuda*, owned by John Vieira.

Connecticut Oyster Firms Oppose New Hours for Closing Drawbridges

Oyster firms which operate boats in and out of New Haven were preparing last month to oppose a proposal for extension of the hours when drawbridges must remain closed to river traffic to speed the movement of vehicular traffic.

Arthur Beach, assistant treasurer of F. Mansfield & Sons Co., said that the extension of the hours in the morning and afternoon when drawbridges would be closed to river traffic would be a serious detriment to his firm. Boats would be delayed in the morning and would be forced to return earlier in the afternoon to avoid being held up for two hours while the drawbridges were closed.

F. F. Brown & Son pointed out that later departures of the oyster boats and earlier returns would cut down on the amount of business the firms could do. They pointed out also, that if the boats were held up while the drawbridge was closed, from 4:30 to 6:30 p.m. each day, there would be additional overtime pay costs for the crews waiting to return to the plant.

A hearing on the proposed new hours for the closing of drawbridges was to be held by the Corps of Army Engineers on August 31.

Great Lakes Lamprey Trapping Program Showing Results

Federal Fish and Wildlife Service workers recently reported there is a good chance that the spread of the parasitic sea lamprey into Lake Superior can be checked before the lake trout is affected too seriously.

That estimate of the situation was made by Dr. Ralph S. Hile of the Service's staff after checking results of the Spring lamprey trapping program in Lake Superior. Forty-four traps in as many streams flowing into Lake Superior caught 4,113 adult lampreys headed upstream to spawn.

One bright spot in the picture was the fact that very few lampreys were caught west of Marquette, indicating the infestation is pretty well confined to Superior's eastern end. No lampreys at all were trapped in 19 of the streams, which may mean that only certain ones are preferred by the lamprey for spawning.

The 44 streams on which control devices have been installed represent all of those east of Ontonagon that Lake Superior lampreys possibly could use for spawning. In addition, the Service has seven traps in streams emptying along the north shore of Lake Michigan, and from those took 7,351 lampreys last Spring. In Lake Michigan where the control program is just beginning, the lake trout has been seriously affected by lamprey predation, as it has in Lake Huron.

Hile said he felt the 4,000-plus lampreys trapped in Superior streams represented just about all the lampreys that made spawning runs last Spring. There were a few instances in which electrically-operated control devices broke down for short periods, but the program by and large was very successful.

The more than 7,000 lampreys trapped in Lake Michigan, of course, constituted only a small fraction of the spawning run. Controls in that lake gradually will be extended, Hile said, in the hope that the lampreys can be checked to a point where lake trout numbers can be rebuilt.

Fish Yields Improve with Approach of Fall

Currently on Lake Superior, commercial fishing is heavier. In Minnesota, Wisconsin and part of Michigan waters lake trout trollers were making better catches, while netters were getting better hauls in the Bayfield, Wis., Ontonagon, Marquette, Munising, Grand Marais, and Whitefish Bay, Mich. areas.

Not only in Lake Superior have spawning varieties migrated shoreward, but in Green Bay, Saginaw Bay and in certain areas of Lake Erie and Lake Ontario fish are doing likewise.

The 40' fishing tug "Fair Lady", owned by Capt. Joseph LeBel of Bayfield, Wis., who built her. Her power plant is a 110 hp. Chrysler gasoline engine with 2.5:1 reduction gear and 24 x 24 Michigan propeller. Other equipment includes Linen Thread Co. Gold Medal nets, Danforth anchor and Bendix depth sounder.

Whitefish yields, generally have been fair but not extraordinary. In the Michigan "Thumb" area several good whitefish hauls were made, but generally takes are only fair.

Probably the largest single lake trout reported this year was taken by Ole and Clara Severson, Munising commercial fishermen, in their nets on Ward Island reef. It weighed nearly 48 lbs. The fish, incidentally, carried nine sea lamprey scars—evidence that the predator has been doing its work in Lake Superior.

On Green Bay commercial production is on an impressive upswing. Good catches of perch, carp, and chub in some cases were made. Walleye takes were somewhat improved over last month's catches in the northern Green Bay region.

In the Mackinac Straits area, due to construction work on a new bridge, commercial fishermen in some cases have moved their operations. Catches of perch, herring and bullheads by small operators were fairly consistent in commercial quantity. An occasional sturgeon has been taken along the shores of Cheboygan and Presque Isle Counties.

On Lake Huron, commercial takes of pike, perch and herring by netters were, generally, fair to good. Whitefish takes haven't been too impressive. Much of the activity is centered around the Saginaw Bay area where catches of perch, chub, bullheads, suckers, pike, etc. have been fairly consistent.

On Lake Erie, as Fall approaches, fishing pressure is greater, with both pound and gill net operators making improved catches. A Lay Brothers fisherman reported good catches of carp, catfish and improved walleye takes were being made in the Sandusky, Ohio area. In western waters good perch yields were being made. Yellow pike yields in the Kelleys Island area were fair to better. And fishermen operating in the extreme western waters were getting fair takes of yellow and blue pike.

In eastern waters, Circle Fisheries, Smiley Fisheries and other companies were getting some whitefish, but catches were poor to fair, while pike takes were relatively better. White bass production was down over Spring catches, while sheepshead yields were in good quantity.

Sixth Annual Fleet Blessing

The Most Rev. Thomas L. Noa, D. D. bishop of the Marquette Diocese, again officiated at the sixth annual blessing of the fleet at Fayette Harbor, Mich. in the Garden Peninsula on August 1. As in previous years, hundreds of people crowded the shores of this picturesque harbor to witness the impressive and age-old rite.

Although the ceremony has been enacted each year for decades on the East and West Coasts for the dragger, shrimp and sponge fleets, Fayette Harbor is believed to be the only port on the Great Lakes where such a ceremony takes place for the boats of the fresh water fleet. Sponsored by the parishioners of St. Peter's Parish, this annual event attracts large crowds each year from all parts of the country to Fayette, which was once a thriving ore-smelting community.

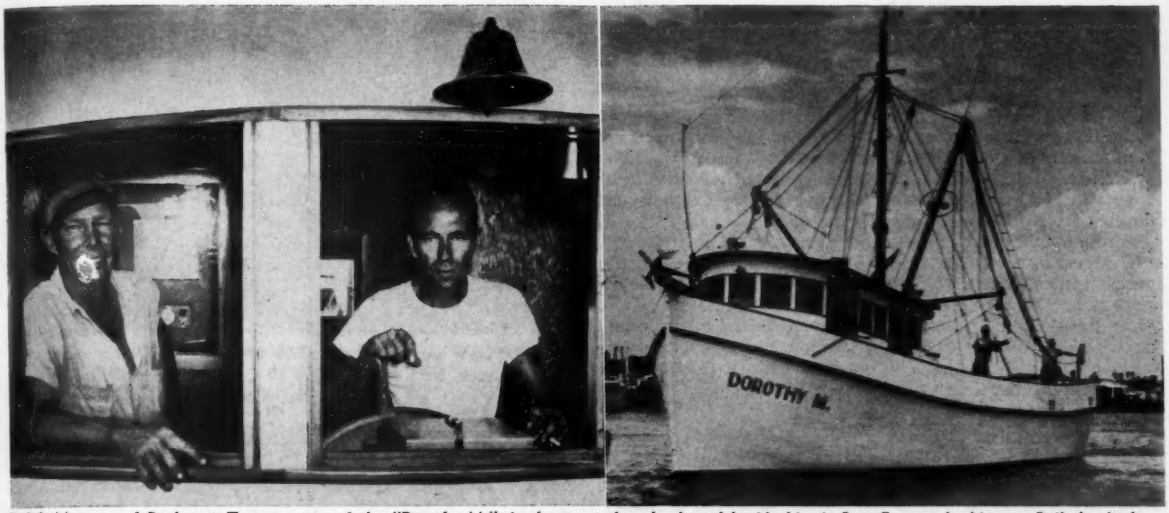
After the iron company's operations began to grow less, many of the families turned to farming on the cleared land, while others took up commercial fishing. The presence of so many commercial fishermen prompted the church authorities to hold the first annual blessing of the fleet in 1949.

Chestnut Lampreys Found on Trout

Four lampreys were found attached to a 26-inch brown trout recently taken from Cole Creek west of Manton, Mich. They were believed to be chestnut lampreys, one of five species found in Michigan waters.

Fish men doubt that the troublesome sea lamprey, which has damaged the trout population in the Great Lakes, has penetrated Michigan streams very far.

The brown trout was taken by Keith Cantaine of Eaton Rapids. He said the lampreys were six to 10 inches long and chestnut colored. The adult sea lamprey is gray-black and measures about 18 inches.



Ralph Mattern of Rockport, Texas, owner of the "Dorothy M.", is shown at the wheel, and beside him is Sam Eastwood, skipper. Built by Jackson Marine Services of Rockport, the craft was launched in July and is Mattern's first shrimper. She is powered by a 205 hp. General Motors 6-110 Diesel turning a 50" x 44" 4-blade Federal wheel through 4½:1 reduction. Other equipment aboard is a General Electric ship-to-shore telephone, Fathometer, automatic pilot and 32-volt Onan light plant.

Texas Shrimpers Organize Marketing Cooperative

The formal opening of Port Isabel's newly-chartered Shrimp Marketing Association took place on September 1, and the cooperative is now engaged in buying and selling shrimp. It was formed for the purpose of creating a more stable market on quality shrimp, which would benefit both the consumer and the producer.

Officers are: F. L. Routh, president; Manuel Sanchez, vice-president; Dwight D. Taylor, treasurer; John Cerneka, secretary.

The Board of Directors includes F. L. Routh, Manuel Sanchez, Dwight Taylor, Earl Lemaire, S. M. Snodgrass, Emory Green, Frank Green, F. P. Tower, Brooks Merrel and Ray Tolson, Jr.

Landings for Ten Months Are Ahead

Landings of marine products at Texas ports during the first ten months of the current fiscal year, which began September 1, 1953, are well ahead of the same period in the previous fiscal year. Total production for the ten-month period of this fiscal year was 99,878,000 lbs., a 29 per cent increase over the last fiscal year.

Oyster production made a big comeback with a total of 514,600 lbs. of meats for the first ten months of the current fiscal year. This was an increase of 100 per cent over previous year, when 259,800 lbs. were reported.

Blue crab production doubled in this fiscal year, with 38,700 lbs., compared to 17,000 lbs.

Shrimp landings were 49,835,300 lbs., and showed a gain of about 4.5 million lbs. Edible finfish landings amounted to 2,145,000 lbs., against 2,492,700. The menhaden yield was 47,302,800 lbs., for a 100 per cent increase.

Two New Trawlers from Horton Shipyards

J. R. Clegg Shrimp Co. of Port Lavaca and Brownsville recently received delivery on their trawler *Sammy C.* from N. R. Horton Shipyards of Bayou La Batre, Ala. The vessel is powered with a GM 6-110 Diesel engine furnished by Kennedy Marine Engine Co. of Biloxi, Miss. The *Sammy C.* is now working in the South Gulf with her home port as Brownsville.

The trawler *Six Kids*, also built by the N. R. Horton Shipyards, has been delivered to the Brownsville Shrimp Exchange. She is powered with a GM 6-110 Diesel.

Shrimp Landings Are Heavy

Recent favorable weather along the Texas coast and good fishing conditions in the Southwest Gulf have contributed to increasingly large catches of shrimp with record landings at coastal ports. Above average concentrations of white and brown shrimp have been found along the middle and upper coast between the 10 and 16 fathom line. Night shrimping has produced from 500 to 900 lbs. of average-sized shrimp per night in this area.

However, restrictions on the use of trawls larger than 10' have curtailed bay and inland water production. Scarcely enough shrimp have been available for bait. The ban on large trawls in the bays and inlets was to be lifted August 31, but shrimp fishermen are not expecting much production from bays. A number of smaller trawler operators object to bay shrimping because of obstructions attributed to oil development.

Shrimp trawling in the deeper waters of the upper Gulf and fair conditions in the Campeche and West Gulf areas have resulted in uniformly large catches of "brownies".

Finfish Production Up

Production of edible finfish from waters of the bays is showing some gain over last year, with increased catches of red drum and speckled sea trout. Flounders are scarce.

During June 14,691,800 lbs. of menhaden were landed at upper coast ports, which was a large increase over June, 1953.

New Trawlers Working for Duque Seafoods

John S. Santos' new trawler *Little Mitch* will be worked out of Aransas Pass for Duque Seafoods Co. The boat is 75' long and powered by a 210 hp. Murphy Diesel, with Twin Disc clutch and Snow-Nabstedt marine gear.

The *Sammy Lee*, a new trawler jointly owned by Duque Seafoods Co. and her captain, Roy Collect, has just been put into service.

Shrimper "Raymond Todd" Lost

The shrimp trawler *Raymond Todd*, which left Aransas Pass around the middle of August under command of Capt. Tommy Harris, has been given up as lost. The body of J. R. Kenney, age 23, of Aransas Pass, washed ashore near Port O'Connor shortly after the search for the trawler started. Two other members of the crew are unaccounted for.

Mississippi Fish Landings Show Big Increase

Landings of fishery products at Mississippi ports during June amounted to 25,820,000 lbs. compared with 11,883,000 lbs. landed during the corresponding month of the previous year. This represents an increase of 117 per cent compared with the same month in 1953.

Menhaden landings amounted to nearly 24 million lbs. and were almost three times greater than those for the corresponding month of the previous year. Shrimp receipts were down nearly 900,000 lbs. during June, 1954.

Landings of all fishery products at Mississippi ports for the six-month period ending with June 1954 amounted to over 39 million lbs. compared with 37 million lbs. landed during the first half of the previous year.

Tuna Clipper Goes Aground

The 379-ton tuna clipper *Gulf Star*, owned by Cecil Drake of Biloxi, was reported ashore on the Peruvian coast last month. Crews of tuna boats arriving recently said radio reports indicated that the *Gulf Star* was in distress from a hull leak and was purposely run ashore to prevent sinking.

Shrimp Film Ready for Release

An educational film titled *Shrimp Please*, sponsored by the Fish & Wildlife Service and the shrimp industry of Louisiana and Mississippi, will be available for showings in late September.

Designed to stimulate consumer interest in shrimp, the film depicts Gulf of Mexico shrimping operations, canning, breading, drying and freezing processes, and the many methods of preparing shrimp for the dinner table.

With the new shrimping season now under way, release of the picture is aimed at creating additional markets for the season's catch. Produced in sound and color, the 16 mm. film has a running time of about 18 minutes. Prints of the film will be available without charge on a loan basis from the Fish & Wildlife Service, Dept. of the Interior, Washington 25, D. C.

North Carolina Considering Closed Season for Currituck Sound

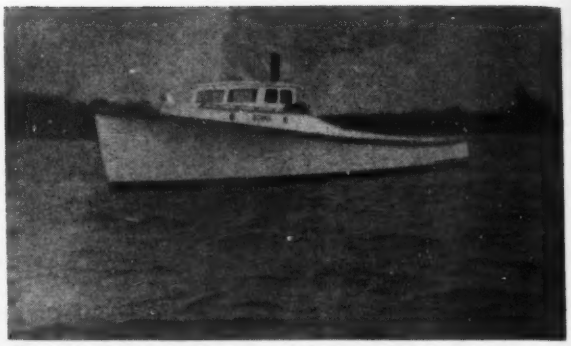
A public hearing on a proposal to close Currituck Sound waters to commercial fishing each year from April 1 to September 15 will be held at Poplar Branch in Currituck County on September 27. The hearing will be conducted by the State Board of Conservation and Development and proponents and opponents of the proposal will be heard, Director Ben E. Douglas of the Department of Conservation and Development said.

Cecil Morris of Atlantic, chairman of the C&D Board's Commercial Fisheries Committee, will preside.

To Join Menhaden Fleet

The YMS 448, *Pauline*, bought by Beaufort Fisheries to be converted into a menhaden boat, was on its way to Morehead City last month from Oregon. W. H. Potter, president of Beaufort Fisheries, said converting of the craft to a fishing vessel would take about six weeks. She is expected to be ready for the fishing season this Fall.

The *Pauline* sailed from Portland, Ore. July 28 under Capt. W. G. Sampson of Seattle, Wash. One hundred thirty-six feet long, with a 24.6 ft. beam, the *Pauline* draws 8½ ft. Mr. Potter said the boat's draft, loaded, would exceed the available depth in Taylor's Creek Channel, and until such time as the presently authorized project to deepen Taylor's Creek is accomplished, the boat will be used with limited cargo capacity.



The 40' crab boat "Donna", which is owned by Winnie Adams of Fishing Creek, Md., and has 17 x 10 Columbian propeller and Snow-Nabstedt reduction gear.

Maryland Is Attempting to Revive Terrapin Industry

There is a possibility that the diamond-back terrapin industry will be revived at Crisfield. Experimentation with diamond-back terrapin, with a view to bringing back to Maryland an industry that at one time flourished in the State will be one of the prime objectives of the University of Maryland's new Crisfield Seafood Laboratory.

Maryland has been boarding more than one thousand diamond-back terrapin in Beaufort, N. C. for some time, under a contract with the U. S. Fish and Wildlife Service. These terrapin recently were returned to Crisfield and placed in a specially-constructed pen at the State Laboratory.

Crisfield formerly was the center of the diamond-back terrapin industry. Of late years the number of terrapin has declined and the business of selling them has fallen off, until today the industry is at an especially-low ebb.

According to Egbert L. Quinn, former Mayor of Crisfield, the climate, temperature and feed in and around Crisfield are just what terrapin like. He continued: "Starting with the number of terrapin that have been returned here from North Carolina, it will take some years to get the industry back on a paying commercial basis again, as terrapin grow very slowly." "But", he said, "there may be a good future for terrapin—shipped alive and cooked and canned for shipment. It's partly a question of having a supply which will permit processing or selling at a reasonable price."

Crab Supply Expected to Increase

Chesapeake Bay crabs were running scarce early in August, watermen in the tidewater areas reported recently, but it was expected that the supply would increase substantially in the next few weeks. There was an unusually large run in May and June, and by the middle of last month plenty of crabs were expected, according to Booker Ward, a Crisfield seafood packer.

Mr. Ward based his prediction on the appearance of a number of "red biters" or female crabs. These "red biters", he explained, mark the beginning of the annual migration of female crabs up the Chesapeake Bay.

Television Show About Seafood Industry

The story of the seafood industry of Crisfield, and of "Carvel Hall" cutlery, manufactured by Chas. D. Briddell, Inc., is to be televised over a coast-to-coast hookup in the near future. Sponsored by the National Association of Manufacturers, pictures and stories will tell of Crisfield's largest and next largest industries.

Photographers and writers have been out on Tangier Sound to get data and pictures on crab potting.

Louisiana Oystermen Elect Martina as President

The Louisiana Oyster Dealers and Growers Assoc. elected officers at a meeting held in New Orleans last month. They are Glenn Martina, president; Capt. Baldo Pausina, first vice-president; Joseph M. Jurisich, second vice-president; Leopold Talianich, secretary and Louis E. Battistella, treasurer.

Elected to the board were August Pitre, Capt. Bozo Dibilich, Zeljko Franks, Leon Cognevich, Norman Hedrick and Mike Vujnich.

James N. McConnell, director of Oysters and Water Bottoms Division, discussed a plan for a 20-year program of improving the oyster industry, fresh water fishing in Bayou Lamogue and the opening of Bay Gardene.

New Louisiana-Mississippi Shrimp Association

At an organization meeting held August 9 in New Orleans, the Louisiana-Mississippi Shrimp Association was formed and the following officers elected: T. H. Shepard, Jr., New Orleans, Louisiana, president; William G. Lasero, Biloxi, Mississippi, vice-president; James H. Summersgill, Golden Meadow, Louisiana, secretary-treasurer.

Appointed as a steering committee were six men representing the areas to be covered by the Association.

Benefits of Deeper Channel Cited

Brown & Butler, consulting civil engineers, in a recently released report on an economic and engineering survey of the Atchafalaya Bay Ship Channel, have summed up the beneficial effects a channel 20 ft. deep by 200 ft. wide would have on the shrimping industry.

In addition to the shrimping industry there have been repeated inquiries from two other fishing industries as to the adequacy of the existing channel. The tuna industry, particularly on the West Coast has inquired as to channel depths and has indicated its desire to locate at or below Morgan City. However, the requirements for their fleets demand 12 to 16 ft. of water, which is not now available.

The menhaden industry also has showed interest in this project and a large menhaden operator owning interests in the Cameron menhaden fleets has indicated his intention to construct a menhaden plant on the Lower Atchafalaya when the channel improvement is secured.

Shrimp Fleets Blessed

Four Louisiana shrimp fleets—Violet, Lafitte, Westwego and Caernarvon—were blessed last month as the fishing boats were readied for the opening of the new shrimp season. As is customary in this annual event among shrimp fishermen, the boats were highly decorated.

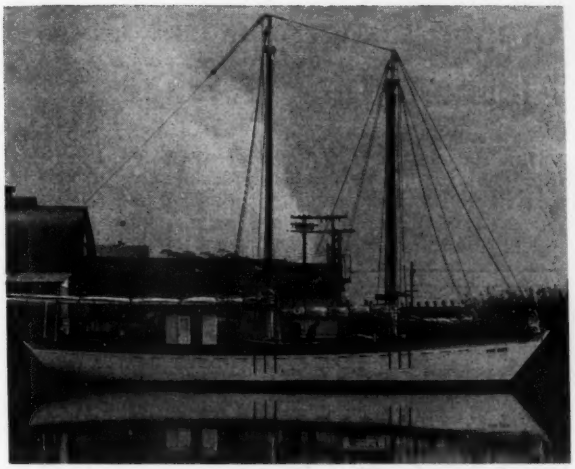
At the Caernarvon ceremonies, the *Singing River*, owned by James F. Jeanfreau, was judged the best decorated by a four-man committee.

Shrimp Quality Research

The Shrimp Association of the Americas has voted a grant of $1800 to the Louisiana State University to help finance the work Dr. E. A. Fieger is doing toward the cause and prevention of undesirable changes in the quality of fresh and frozen shrimp. His work includes the holding in ice of fresh shrimp aboard the catch vessel. From this study the cause and preventive measures of rapid bacterial growth in such shrimp can be determined.

Shrimp Trawler Burns

The shrimp trawler *Three Friends*, owned by Karl Knudsen of Morgan City, burned to the waterline last month. According to Jack Lewis, president-manager of the Twin City Fishermen's Cooperative, the boat was about 18 miles from Port Isabel and was carrying 25 barrels of shrimp at the time of the mishap.



Star Fish & Oyster Company's 82' x 22' x 9' snapper boat "Star Queen" of Mobile, Ala., skippered by Capt. Allen Holgerson. She has accommodations for 6 in the cabin, 4 in the fo'c's'le and a bunk for the Captain in the pilothouse. A 165 hp. General Motors Diesel with 4½:1 reduction gear and 48 x 34 Coolidge propeller gives the boat a top speed of 10 mph. Other equipment includes Willard batteries, Cating rope, Mustad hooks, Hackensack wire rope, and Raytheon Submarine Signal depth recorder. Devoe & Raynolds paint was used on the "Star Queen".

Georgia Inaugurates New Commercial Fish Catch Reporting System

A monthly bulletin on Georgia commercial seafood catches will be published under a new reporting system being inaugurated by the State. David Gould, Coastal Fisheries Supervisor, said it is hoped to get accurate reports on all catches.

A new law requires all dealers to make the reports monthly, and forms have been sent them for the purpose. Reports are sought only from the original dealers, not from retailers, unless they obtain their seafood directly from a fisherman.

The bulletin will be published by the Branch of Commercial Fisheries of the Fish & Wildlife Service from statistics compiled by the Coastal Fisheries Office at Brunswick. The reports will be broken down into three sections: north, including Bryan and Chatham Counties; central, including McIntosh and Liberty Counties and south, including Camden and Glynn Counties.

Alabama Shrimp Season Opens

Only a fair supply of shrimp was in prospect for Alabama's commercial shrimping season which opened on August 9. John Rockwell, chief of the seafood division of the State Conservation Department, said recent checks indicated shrimp weren't too plentiful.

The order issued by Conservation Director Earl McGowin allows daytime commercial shrimping operations in designated areas of Mobile Bay and Mississippi Sound from sunrise to sunset.

June Seafood Catch Shows Gain

Landings of fishery products at Alabama ports during June totaled 1,100,300 lbs. This represented an increase of over 466,000 lbs. or 74 per cent compared with the catch of the previous month. Shrimp was the leading item produced during June, with landings of this shellfish amounting to approximately 693,000 lbs. and comprising 63 per cent of the total month's production.

Oregon Fishermen Get Good Albacore Tuna Catches

Nine Astoria dragboats and perhaps a like number of local trollers reported three to eight-ton catches of albacore tuna in waters off southern California and Guadalupe Island, Mexico, in July and early August.

A third of the local drag fleet sailed for southern waters after albacore failed to appear in Oregon and Washington waters, and Astoria packers cut the price of bottomfish one cent per pound.

Some packer-owned draggers were bringing in capacity loads to fill special orders, with fishermen being paid percentage-of-catch prices on the old scale. A few skipper-owned boats brought in limited landings at old prices, but owners and crews declined to fish on the new rates offered by canneries.

New Ruling for Clam Diggers

Effective September 1, clam diggers must abide by a new ruling of the Oregon State Fish Commission which specifies that razor clams have a minimum length of 4½ inches, rather than the 3½ inch minimum prevailing for many years. Sports clam diggers will be limited to 24 clams, this regulation being effective on the same date.

A greater harvest in poundage will be achieved under the new regulation, it is believed, since clams would be allowed to grow past their second year, at which time they spawn.

Use of razor clams for crab bait also was legalized by the new regulations for all of the Oregon coast. Previously, only Clatsop County, northernmost of coastal counties and chief producer of razor clams, was permitted to use the clams as crab bait.

Chinook Salmon Run

A minor run of chinook (king) salmon entered the Columbia River estuary during the last week of the August gillnet season to close the season August 26 with catches averaging 500 lbs. on a night's drift. Many boats landed 600 to 900 lbs., and there were a few dozen catches of more than a half-ton. High boat was listed at 1800 lbs.

A scramble for fish developed among packers and fresh market buyers during the final week of the August season, with the price to fishermen fluctuating between 18 and 28 cents at the major canneries. Up to 30 cents was paid by fresh market buyers.

The 36' crabber "Lou Ann", which was launched in early August at Columbia Boat Building Company ways on Young's Bay in Astoria, Oregon. Co-owners are Jack Webb and Chris Henry, who plan to use her as a charter boat until opening of the Fall crab season. She was designed by Matt Tolonen of that firm, and is a derivative of the Columbia River gill-net boats. The "Lou Ann" has a beam of 11' and draws 4'. She is powered by a Chrysler Imperial V-8 200 hp. engine with 2.5:1 reduction gear and a 23" x 17" Federal propeller.

Salmon Hatchery Improvements Made

Long-needed improvement and expansion of the Klaskanine salmon hatchery, 10 miles southeast of Astoria, has been completed and formal acceptance of the station from the construction company took place in Portland at the August meeting of the Oregon Fish Commission.

The new plant will be ready to handle eggs of silver and chinook salmon ascending the north fork of the Klaskanine River this fall. Enlargement of the hatchery was started in July, 1952, for the purpose of speeding up the rehabilitation of depleted runs of these fishes in the Klaskanine and nearby streams.

Improvements at the hatchery include a thorough overhauling of the domestic and fish production water supply systems, construction of an 18 million egg capacity hatchery house with cold storage facilities for 200 tons of fish food. Young chinook salmon will be housed for 90 days in 16 modern ponds before release into the stream. Silver salmon will spend their 14 months at the hatchery in a single two-acre pond and six raceway ponds totaling 820 ft. in length.

Dragboat Sinks

The *Hero*, well known Yaquina Bay dragboat, sank last month while tied to its mooring place and was raised late the following day. Gus Christensen, the vessel's owner, reported that when he left the boat the night before there was no apparent leak.

About 20,000 lbs. of bottomfish, iced in bins, went down with the craft. A diver was engaged to put slings under the 48 ft. boat, and a dredge lifted it to the surface where the spoiled cargo was taken out.

Yaquina Bay Salmon Catches Decline

Salmon catches dwindled late in August, and the all-over salmon picture wasn't as good as last year at the same time in Yaquina Bay.

The calm weather August 21 brought sport fishermen into the Bay in droves, and shortly after noon the river's mouth was dotted with skiffs. They are reported to be having better than average luck, and some nice silversides were displayed along the waterfront. Fishermen have been using herring for bait, mainly.

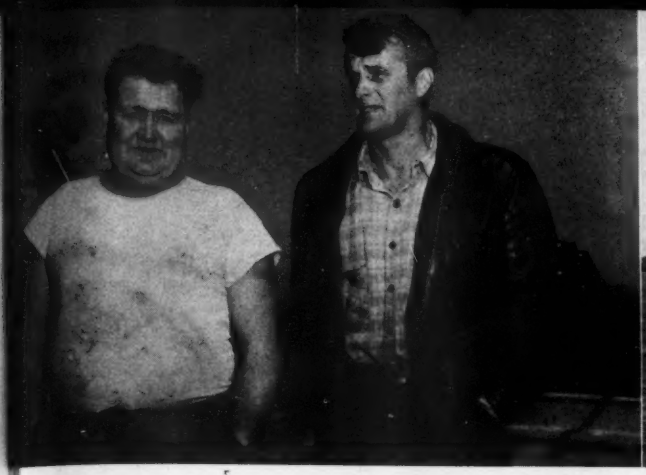
The first tuna has yet to make its appearance in the Yaquina Bay area.

California Boats Make First Albacore Catches of Season

Mid-August found most of the commercial fishing fleet at Eureka putting to sea to meet the first run of albacore. The run centered about three hours off the Mendocino coast.

First boats returning with a cargo were the *Craft King*, operated by B. Harris, and the *Esther Cotter*, Capt. Frank Sutton. Together the two boats delivered 4,600 lbs. to the Balestrieri Fish Co., Eureka. Most of the fishermen in the area were expecting a good run this year, the first of much importance in several years.

During the early part of August, nearly all the local commercial fishing boats were fishing for albacore out of Fort Bragg and Shelter Cove.



John Jossund (left) and owner Arne Grotting aboard the 52'8" x 14'10" x 7' fishing boat "Clara G." operating out of Eureka, Calif. This boat is powered by a 120 hp. Caterpillar D13000 Diesel.

First catch of albacore for fishermen at Noyo, Fort Bragg, was reported in mid-August with the delivery of a ton of fish to the United Fish Co., according to Allen Cook of that firm.

Salmon fishing held fairly steady, some 100,000 lbs. being delivered to various fisheries on the Noyo River during one week in August. Fishermen were getting 38 cents for large, 30 cents for medium and 25 cents for small salmon in August.

Join Humboldt Bay Fleet

Registration of a number of boats from other points recently has augmented the Humboldt Bay fishing fleet. The new 23-ton *Tarantino, Jr.*, built by the Makeley Brothers at Fort Bragg and owned by Augustino Tarantino, is among the group. Also included are the *Sea Breeze*, formerly of Tacoma, owned by J. L. Connor, Jr., of Eureka; *Porkey*, Sterling E. Alvin of Eureka; and the *Landie Lee*, from Ketchikan, Alaska, owned by Alf B. Anderson of Miranda.

Sardine Canning Season Starts

The northern California sardine season got off to a poor start, with less than 10 tons delivered to the Monterey canneries August 1-25. Four canneries opened in the 14-cannery row, and a 900-ton delivery of jack mackerel brought a $60,000 payroll to fishermen and put 400 persons to work during the week of the 23rd. Some anchovies, shipped in from southerly ports on iced tank trucks, and a few local albacore also were processed.

The sardine price was settled at $55 a ton, jack mackerel $70, Pacific (blue) mackerel $80, and anchovies $37.50.

The season from the northern borderline to Pt. Arguello is from August 1 to January 15. The southern season from Pt. Arguello south to the Mexican border is October 1 to February 1.

Samplings taken in the south showed that a large number of the pilchards are Mexican fish, a type almost identical with the California sardine.

Fish & Game officials have given out no reduction permits this year, and repeatedly have recommended cessation of purse seining until sardine schools have a chance to build up again—during a three-to-four-year period.

Tuna Clipper Sinks

Eleven men who survived the sinking of the $250,000 tuna clipper *Calistar* 100 miles off Baja, California, were on their way back to San Diego last month. The Coast Guard said the *Calistar* foundered and sank 700 miles south of its home port of San Pedro. The fishing boat *Marilyn Rose* rescued the crew of the distressed ship.

Fisheries Study to Be Undertaken

Following a request from the Humboldt County Board of Supervisors, the Fish & Wildlife Service, the Bureau of Reclamation, the Calif. State Dept. of Fish & Game and the State Division of Water Resources have launched in Eureka a comprehensive study of the fish resources of Northwestern California.

Surveys will be taken of the number and species of fish, flow of water which will be needed to sustain or improve a fishery, mapping of spawning beds, determination of sports and commercial catches of fish, and an estimate of the economic and recreational value of fish populations.

Covered in the project will be the Klamath River, Mad River, Van Duzen River, Eel River, Mattole River and Redwood Creek.

Salmon Season Drawing to Close

Although some catches were being taken by Eureka boats operating off Humboldt Bay, salmon operations thinned out considerably in August. The year's total salmon deliveries, however, maintained the 1953 landings of more than 500,000 lbs. The commercial salmon fishing season ends September 30.

Meanwhile, salmon were reported to be running strong in the Shelter Cove and Fort Bragg area, attracting many Eureka boats to the southern Humboldt waters.

On the Ways for Repairs

Gillette's Marine Ways at Fairhaven and Graham's Boat Basin and Marine Ways at Fields Landing report that a number of boats operating off the Eureka coast were on the ways during August.

Repairs were made on the following boats at Gillette's: *Sea Hawk*, owned by Frank Dean; the *Peacock*, owned by Joe Hansen; the *Holden*, owned by Eldon Holden; *Homestake*, owned by Ernest Lefiles; the *Eros*, Capt. Gene Tison and the *Maine* from Crescent City, all salmon boats. Also on the ways were the dragboats *Thomas J.*, owned by Louis Legao and the *Amac*, operated by Charlie Ells.

Boats up for repairs at Graham's Basin were the *Fairway*, skippered by G. O. Smith of Crescent City; the *Leonette*, being fished by Bert Canuchi; and the dragboat *Clara G.*

Salvatore Giamona

A Monterey pioneer of the fishing industry, Salvatore Giamona, died at sea August 25 of a heart attack. He was with the crew of the purse seiner *J. B. Campagno.*

Mr. Giamona had lived in Monterey for 34 years. He had been a commercial fisherman all his life, and was a member of the Fishermen's Seine and Line Union AFL Local of Monterey.

Virginia Studying Summer Mortality of Oysters

Studies of the causes of oyster mortality, conducted by Drs. J. D. Andrews and W. G. Hewatt of the Virginia Laboratory have proved that the fungus dermocystidium is related to high Summer mortality among oysters. The Hewatt-Andrews studies also show that the highest death rate among oysters occurs in the June-October period, while the November-May death rate is lowest.

In test trays of oysters maintained at the laboratory, the peak mortality rate is about three oysters per thousand each day. Virginia laboratory studies show that James River seed oysters, brought to Gloucester Point during or just prior to the warm season, showed much lower death rates during the first year than did seed oysters brought from the same region and acclimated for six months or more before the onset of hot weather.

Size does not appear as important as age in relation to Summer mortality. Some oysters were more than three inches long and well shaped at the age of 12 months, yet the warm season mortality rate was low among them. Oysters under two years of age did not show as high mortality rates as did older bivalves.

Crab Packing Drawing to Close

Seven crab packing houses in Tangier Lagoon soon will dry their floats, as the season is expected to be shorter than usual this year. Whereas in August 1953 the seven crab houses averaged about 160 boxes a day, with from 8 to 12 dozen in the box, this August they shipped only about 30 boxes a day.

Gillers Making Good Catches

Gilling, which started early in Tangier, is picking up fast. Captains Charlie Angel, Dorsey Crockett, and John Crockett, fishing their nets near Herring Island, have made some good catches this month. The average take to the giller is 500 spot, 40 croakers, and 12 bluefish.

Pound Fishermen Catching Bait Fish

Tangier pound fishermen have not been catching many food fish this month, but they have been taking a good many bait fish and selling them to potters and trotliners. Capt. Wyatt Pruitt has been getting from 80 to 200 bushels of menhaden a day, which he sells for one dollar a bushel.

Hampton Roads Area Landings

An increase of nearly 450,000 lbs. was shown in the Hampton Roads area fish production during August. The catch amounted to 1,350,000 lbs., most of which came from pound nets. Croaker predominated among the different species, with landings of 902,600 lbs. Second position was taken by spot, with 183,000 lbs.

South Carolina Having Good Shrimp Run in Inshore Waters

Once again "crick" shrimp are running in large numbers and recently a Charleston man found a "hole" full of these shrimp and using a cast-net, he brought home 90 pounds one day and 80 pounds the next.

From Savannah to Little River, reports indicate that the succulent shrimp are making their annual appearance in tidal estuaries. Offshore, the larger shrimp are being caught by trawlers for shipment to markets elsewhere.

Fishing Ban Extended

The closed season on all fishing in Hampton County was extended for 30 days beginning August 7, according to A. A. Richardson, resources and game division director of the South Carolina Fish & Wildlife Department.

Capt. John Marincovich on the flying bridge of the 57' purse seiner "Cheryl Ann" of Everett, Wash. The vessel carries a 9-man crew and is equipped with a 6-110 General Motors Diesel with Twin Disc 3:1 reduction gear, and Freeman Metal Marine Pilot.

Washington Fishermen Report Best Sockeye Run in Years

The richest Pacific Northwest sockeye salmon run since 1913 is now in progress. The total American-Canadian catch from the Adams River run through August 30 was 6,000,000 fish valued at $12,000,000. Another million fish was expected to raise the value to $14,000,000. The salmon averaged 7½ lbs. each.

The bulk of the catch was from waters between the Strait of Juan De Fuca and Georgia Strait as the fish headed for the Adams River in British Columbia to spawn.

The combined fleets of Canada and the U. S. caught $1,500,000 worth of sockeye salmon in Puget Sound and other Pacific Northwest waters during July. It was the largest July catch on the four-year cycle since 1914. The total take for July was 850,000 fish.

Oyster Larvae Continue to Survive

Plankton samples taken by the State Shellfish Laboratory at Quilcene, Wash., August 20 and 24 in Dabob and Quilcene Bays showed continued survival of the few larvae present. These larvae have now developed into the advanced-umbo stage, and such setting as they will produce was expected to start by the end of August. There also were a few early-umbo larvae present; however, it was too early to speculate on the amount of setting they will produce. Counts on experimental cultch in the water between August 18 and 24 indicate no setting as yet.

It is not possible to predict the number of spat expected this year, since hydrographic conditions are less favorable than any observed during the past three years. In view of the number of larvae present, and the depth of the warm water layer, setting intensity is expected to be less than 10 spat per shell.

Catching Albacore off California

Many Seattle and Puget Sound area boats were fishing off the California Coast during August. The albacore fishery in California waters was running slowly early in the month, but picked up by mid-month. Some jig boats were landing as many as 300 fish a day off the Point Arguello and Point Sur areas. The fish averaged 12 lbs. First deliveries at Monterey, Calif. brought an average of $360 a ton.

Studying Clam and Crab Mortalities

A mysterious condition which killed thousands of clams and crabs along Washington's ocean beaches apparently

had vanished after a brief but disastrous visitation August 17-18. Research experts still are trying to find out what killed the shellfish.

Thousands of razor clams and crabs were found dead along the beaches, but no trace of any "red tide" or other organisms which might be fatal to shellfish were discovered according to Donald R. Johnson, chief of research for the Washington State Dept. of Fisheries.

Fisheries men found that clams in the water were alive and healthy. They reported that cats and chickens which were fed some of the dead clams suffered no ill effects.

Resume Studies of Fishing Gear Materials

P. J. G. Carrothers, for the past nine years in charge of the fish net and gear research laboratory of the firm of Edward Lipsett, Ltd., at Vancouver, recently was appointed to the staff of the Pacific Fisheries Experimental Station at Vancouver to head the station's resumption of its investigations on the specifications, properties and care of fishing gear materials. Particular attention is being devoted to the properties of nylon and other synthetic fibers.

Brill Tagging Project

United States trawlers, operating last Winter off the west coast of Vancouver Island, located what appeared to be one of the major spawning grounds of the brill or petrale sole.

At the invitation of the Washington State Fisheries Department, Canada's Pacific Biological Station participated this Spring in a cooperative tagging project on these spawning grounds.

Recoveries of tags by the Canadian and American fleets in recent months and in years to come should throw more light on the relation of the Winter spawning stock off Estevan Point to the stocks which occur later in the year on north coast banks and also on the shallower grounds off the west coast of Vancouver Island.

Seattle Landings for August

Boats engaged in the otter trawl fishery landed 1,352,700 lbs. of fish at Seattle during the month of August, which was approximately 300,000 lbs. more than in the previous month. The catch was brought to port in 30 trips, and cod (true), with 513,300 lbs., accounted for the largest proportion of the yield. Next was perch (Pacific Ocean), with 317,700 lbs. A total of 183,350 lbs. of fish were brought in on the 24th, which was the heaviest catch for any day in the month.

The halibut fleet landed 5,211,550 lbs. of halibut, and this was nearly a million lbs. more than in July. These boats also brought in 19,400 lbs. rockfish, 262,700 lbs. sablefish, 3,085 lbs. lingcod, 1,200 lbs. cod and 500 lbs. mixed cod.

The 65' dragger "New Mexico" owned by Sam Lee of Astoria, Ore. She is skippered by Capt. George Takanen, and is powered with a 6-71 General Motors Diesel.

Halibut Catch Is Expected to Break All Records This Year

Edward W. Allen of Seattle, Wash., chairman of the International Pacific Halibut Commission.

The International Pacific Halibut Commission reports that halibut landings on the Pacific Coast this year already have reached 68,000,000 lbs., about 8,000,000 more than were landed during all of 1953. By November 15, after which the landing of any halibut is prohibited, the catch probably will exceed 69,500,000 lbs. and be greater than the long-standing record of 68,750,000 lbs. established in 1915 when the fishery still was exploiting virgin stocks in the Gulf of Alaska.

Under the unrestricted fishing of those earlier years the annual catch declined rapidly to about 50,000,000 lbs. in spite of constantly increasing fishing and expansion to new grounds. In 1931, when fishing had extended clear into Bering Sea, a nine-month fishing season was required to secure a catch of only 44,200,000 lbs. Fishing became unprofitable.

The Commission has managed the halibut fishery under treaties between the United States and Canada since 1932. By controlling the amount of fishing, it has improved the stocks, made fishing more and more profitable, and made possible the taking of larger and larger annual catches.

In 1952 and 1953 under careful regulation, annual catches averaged 61,750,000 lbs., an increase of 17,500,000 lbs. over the catch taken by the unrestricted fishery in 1931. This was as much as the Commission safely could allow to be taken from the banks under the treaty limitation which confined fishing to a single season of the year.

New Halibut Treaty

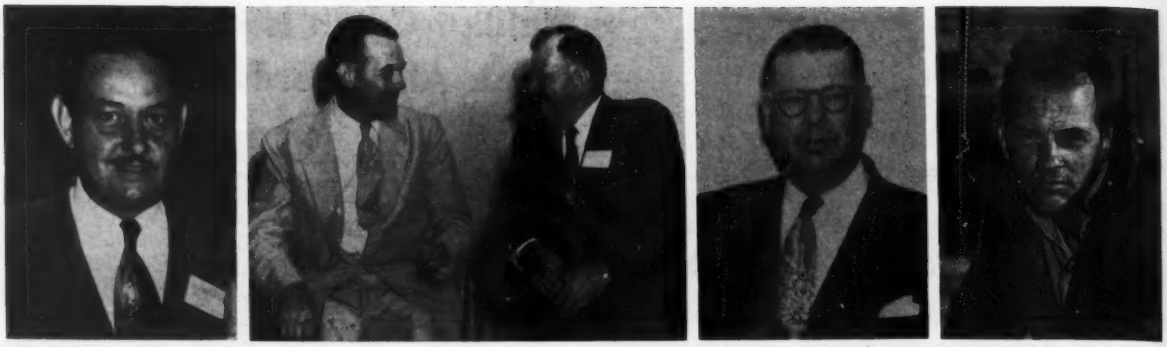
The new halibut treaty ratified last year permitted the Commission to establish more than one season in any area so that advantage could be taken of stocks which afforded the best fishing at different times of the year. This treaty change had been urged by the Commission since 1946. Under the new flexible authority, this year's regulations provided such additional open seasons as the Commission believed could be established without depleting the stocks. They resulted in the present increase in catch.

The ultimate goal of the Commission is to secure the greatest possible annual yield that the banks are capable of producing year after year. To maintain such a stabilized production on a high level requires allowances for the natural year-to-year variations which appear to be inevitable in ocean fisheries. Hence, although the Commission is pleased with the greatly increased catch, it recognizes that it must carefully analyze the effect upon the stocks and must continue experimentation as the only practical way to know what is happening.

The 1954 catch will be 25,000,000 lbs. greater than the annual total in 1931, the year preceding regulation. At present dockside prices to the fishermen, the gain for this year alone is worth about $4,250,000.

Members of Commission

Members of the Halibut Commission are: for Canada, George R. Clark, Ottawa; Harold Helland, Prince Rupert; Richard Nelson, Vancouver, B. C.; for the United States, Edward W. Allen, Seattle, Wash.; J. W. Mendenhall, Ketchikan, Alaska; Seton H. Thompson, Washington, D.C. Messrs. Allen and Clark are chairman and vice-chairman respectively during the current year.



Five directors of the Oyster Growers and Dealers Association, including from left to right: Joseph Jurisich, New Orleans, La.; Frank M. Miles, Norfolk, Va.; Lemuel B. Newcomb, Vineland, N. J.; G. I. Rupert Lore, Solomons, Md.; and John W. Mayhew, West Tisbury, Mass.

Oyster Convention

(Continued from page 16)

with D.D.T. The recently imported New Zealand barnacle has rendered their coated egg crate partitions worthless for catching oyster spat after as short a time as 48 hours."

Dr. Nelson also showed slides and gave a talk at one of the general sessions on "A Visit to the Oyster Industry of Holland and of Great Britain, with Some Impressions of Shellfish Research in Europe, in 1953".

Other contributors to the symposium on oyster setting, besides Dr. Nelson, were: Dr. J. D. Andrews of the Virginia Fisheries Laboratory; G. F. Beaven, Chesapeake Biological Laboratory; Dr. S. H. Hopkins, Texas A. & M. College; Dr. V. L. Loosanoff, Fish and Wildlife Service Laboratory, Milford, Conn.; Dr. G. R. Lunz, Bears Bluff Laboratories, Wadmalaw Island, S. C.; and J. R. Nelson, F. Mansfield & Sons Co., New Haven, Conn.

Clam Farming in Maine

Dana E. Wallace, Shellfish Specialist with the Maine Department of Sea & Shore Fisheries, discussed clam farming. He said that Maine's hard and soft-shell clam fishery is dependent upon natural sets, their survival and growth to commercial size, and in the soft-shell clam industry the efficiency with which the clams are harvested.

Wallace asserted: "In the soft-shell clam fishery our early work was concerned with developing ways of using soft-shell clam seed in an effort to find out if it was economically feasible to transplant from heavy concentrations to commercially depleted areas. At the present time transplanting soft-shell clams is not economically feasible. Projects to learn more about predators and their control are continuing and will be reported another year by the Fish and Wildlife Service's Clam Investigations.

"We find that the present methods of digging in the inter-tidal areas are extremely wasteful for present and future production of soft-shell clams. This fact has to be considered in any management plans for our soft-shell clam industry. It appears that less than one-half of the available or potentially commercial clam population in Maine ever reaches the consumer.

"Our work with the commercial diggers in sampling their catch and the flats they have dug indicates that approximately 20 percent of the clams are broken in digging and can be considered as lost to the industry. Federal Clam Investigations found less than 1 percent survival when clams are broken in the flats, and approximately one-half of the unbroken clams remaining in the flats each time the flats are dug die because of depth or position.

"All of this digging information means that we must try to cut down the frequency of digging of the flats and work out a flexible rotation of areas based upon surveys of area, population, size distribution, growth, the presence or absence of predators. It is likewise always important in cooperative planning with communities to determine the best time to harvest the clams considering the biological factors as well as the economics of the fishery and area.

"Unlike the soft-shell clam fishery, we have found that it is definitely economically feasible to transplant quahogs. Quahogs of over approximately ½" in size are relatively immune from green crab damage. They establish themselves in the flats quite readily and growth in our areas is exceptionally good."

Colored movies taken by R. L. Dow, Director of Marine Research for the Maine Sea and Shore Fisheries Department, were presented. The following is a description of the subject matter of these films.

First shown was an area of Western Beach in Scarboro and a pumping arrangement that is being used to gather seed clams. Viewers saw the 2" suction which is placed in the water and the Homelite centrifugal pump, rated at 10,000 gallons per hour. This picks up the water and forces it through a 2" hose. The unit is portable and weighs only 88 lbs.

The water is played through jets down to the flats and the dredge is dragged along at approximately 5 to 10' a minute. Tiny seed clams in a concentration of 2 to 3 hundred a square foot are washed out of the flats. The silt and sand is screened out through the ¼" mesh that is used on the drag, and the jets of water keep the clams moving into the dredge and then back into the detachable mesh bag. Very little breakage occurs. The level of the dredge is set with shoes on the side.

Other colored movies were of the *Venus M.*, 33' converted Army personnel boat which is rigged with a herring sucking pump. The films showed the 8" discharge hose spewing tiny seed quahogs into the water-tight bulkhead to be collected by commercial diggers who brought their boats to the cove in order that the biologists might increase the production of the day's operation. They were able to get 256 bushels on that particular day, whereas the carrying capacity of the barge alone was about 110 bushels.

These quahogs averaged slightly over an inch in size and were compacted in the flats anywhere from 200 to 400 per square foot. The area involved was 3 to 4 acres.

The quahogs are screened over ½" mesh hardware cloth, and most of the water is discharged through scuppers, which are on the side of the craft. The rate of discharge is anywhere from 1 to 6 bushels a minute; however, over an entire tide's operation of approximately 4 hours, it averages out to about a bushel a minute. This is in the order of approximately 2800 seed quahogs each minute that are pumped from the flats. The 6-inch suction leads up to the centrifugal pump where the design of the impeller allows the tiny seed quahogs to go through the pump and out the discharge hose.

Technical Sessions

Technical sessions occupied the August 5 convention program, and the following topics, in addition to Dana Wallace's discussion, got attention: "The New Jersey Natural Seed Bed Research Program"—Dr. Harold H. Haskin, director of the Marine Research Laboratory, Port Norris,

N. J.; "Report on Certain Phases of the Chincoteague Bay Investigations"—M. F. W. Sieling, Maryland Department of Research and Education; "Structure, Formation and Adaptations of the Shell of *Crassostrea Virginica*"—Dr. Paul S. Galtsoff, Fish and Wildlife Service, Woods Hole, Mass.; "On the Rate of Water Propulsion by the Bay Scallop"—Dr. W. A. Chipman, Fish and Wildlife Service, Beaufort, N. C.; "The Functional Morphology of the Alimentary Canal of *Asterias Forbesi* and the Predation of Bivalve Mollusks"—Dr. F. A. Aldrich, Rutgers University; "Preliminary Experiments in the Use of Ground-Controlled Aerial Photography in Inter-Tidal Hydrographic Surveys"—R. L. Dow, Maine Department of Sea and Shore Fisheries.

Other technical papers given on the last day of the convention were: "Distribution of Oyster Larvae in the St. Mary's River in Relation to Certain Hydrographic Factors", by J. H. Manning, Chesapeake Biological Laboratory, and H. H. Whaley, Chesapeake Bay Institute; "Selective Setting of Oysters on Artificial Cultch", by Dr. P. A. Butler, Fish and Wildlife Service, Pensacola, Fla.; "The Distribution of Venus Larvae in the Plankton at Orr's Cove, Maine", by Dr. J. M. Moulton and G. W. Coffin, Bowdoin College; "Food Requirements of Some Bivalve Larvae", by Dr. V. L. Loosanoff, H. C. Davis and P. E. Chanley, Fish and Wildlife Service, Milford, Conn.; "The Tidal Spat Trap", by J. B. Glud, chief, Clam Investigations, U. S. Fish and Wildlife Service, Boothbay Harbor, Me.; "Possible Causes of Growth Variations in Clam Larvae", by P. E. Chanley, Fish and Wildlife Service, Milford, Conn.; "The Functional Anatomy of the Interior Region of the Mantle of *Mya Arenaria* Linne", by L. M. Taxiarchis, Rutgers University; and "Growth Studies in *Venus Mercenaria*", by Dr. A. H. Gustafson, Bowdoin College.

Florida Gets Tuna Catch of Exploratory Vessel "Oregon"

The Government exploratory fishing vessel *Oregon* arrived in Pensacola August 20 with 5,000 lbs. of Gulf tuna in her holds. The 100' boat skippered by Capt. Alvin Morgan is operated by the U. S. Fish & Wildlife Service. She is based at Pascagoula, Miss., and carries a crew of 10.

Most of the catch brought into Pensacola was made about 100 miles south of Mobile. All of the fish were caught using the Japanse floating line method, which is said to be virtually unknown by the U. S. fishing industry.

One buoyed master line, containing numerous smaller lines baited with whole fish is stretched out, then reeled in automatically when the fish strike. The master line is often several miles long.

Commercial fishermen for years have seen bluefin tuna in the Gulf, but efforts to catch them in any quantity proved futile until the *Oregon* reported a 3,000-pound take in June. However, according to the Shrimp Association of the Americas, the commercial fishing of tuna in the Gulf of Mexico is still a long way from becoming a reality. The high interest engendered by the tuna catches made by the *Oregon* has been tempered somewhat by the realization of what constitutes a profitable tuna fishery. Production potential is still unknown and until this becomes a known factor no steps can be taken to work out the other problems attendant to such a commercial enterprise. A great deal more exploratory fishing is necessary to answer this important question.

However, the quality of those tuna caught has been favorable, as shown by the results of both commercial and government canning tests. Both recovery and quality of the meat were well above minimum requirements.

Meyer Fish Acquires New Building

A $100,000 expansion of the Meyer Fish and Produce Co. of Jacksonville was announced recently by Max Meyer, president. The Company has purchased a three-story brick building containing 33,000 square feet of floor space, which adjoins the firm's present quarters.

Three shrimp trawlers formerly in the Toomer fleet. Foreground, the "Savannah", now owned by Bob Sadler of Fort Pierce, Fla.; background, left, the "Thunderbolt", owned by John Fernandez, Key West, Fla.; and the "Comerones", which was formerly the "Mary T.", and is now under Cuban registry. All of the boats are Caterpillar-powered.

Meyer's company, founded in 1929, is one of the largest producers of processed and frozen shrimp in the Southeast. It handles between 2½ and 3 million lbs. a year.

Conversion of the newly-acquired building, formerly a cold-storage plant, was to start in September. When the project is completed, the Company will expand its operations to include other seafood and produce.

The firm's current payroll of 200 will be increased to about 250.

Method of Predicting Red Tide

The University of Miami Marine Laboratory has developed a way of predicting when and where the fish-killing red tide will break out. Studies indicate outbreaks follow heavy rains in the interior. Gymnodinium brevis, the minute organisms which make up the red tide, develop very rapidly when fed on fertilizers flowing into the Gulf of Mexico from West Coast rivers.

After learning that the rivers carry concentrations of phosphates and other chemicals into the Gulf, the next step is to find some means of neutralizing the fertilizers with chemicals while they are in the rivers.

An organized plan for keeping abreast of red tide developments on the Holiday Isles has been outlined by Mrs. Bonnie Eldred. Volunteer "spotters" have been enlisted to report weekly on weather and water conditions in 15 districts along the 23 miles of the resort islands and as far south as Mullet Key.

The same volunteers are responsible for taking water samples of Gulf and Boca Ciega Bay waters when requested to do so and to arrange with fishing boat captains to take similar samples of suspicious areas in the Gulf. Mrs. Eldred will make microscopic tests of water samples periodically and submit her findings to the West Coast Coordinating Committee, red tide control agency, in Sarasota.

Tampa Shrimp Firm Plans Expansion

Ocean Products, Inc., Tampa shrimp processors, will offer a $300,000 common stock issue within the next few weeks to meet the needs of a rapidly expanding business. The plant opened last December, and is the first large-scale shrimp processing plant at Hooker's Point.

The financing will go into a new warehouse at the Hooker's Point site and for added sales promotion. New lines, including breaded fish sticks from Gulf products and catfood as a by-product are planned.

Officers of the corporation are Leo Levinson, president; Robert E. Collins, vice-president; Marshall Levinson, secretary; Frank Hobbs, Louis McClure and John C. Mills, members of the board of directors.

When the spray is like needles

...KEEP DRY

Vulcanized seams—to make the whole garment watertight. Specially developed compounds provide greater resistance to sun, water and abrasion.

U. S. SAFE AND SEINE SUIT
- strong heavy-coated fabric
- vulcanized watertight seams
- inside fly front
- underarm ventilation
- rust-resistant ball and socket fasteners
- overalls: large bib front, adjustable shoulder straps.

U. S. SQUAM HAT
- reinforced water-shed brim.

U. S. RUFF-N-TUFF EUREKA SUIT
- strong heavy-coated fabric
- vulcanized watertight seams
- inside fly front
- rust-resistant ball and socket fasteners
- underarm ventilation
- overalls: bib front, adjustable elastic suspenders.

TRAWLER BOOTS
- Black thigh
- Felt lined
- "Fin-Guard" vamp.

SOLD ONLY THROUGH INDUSTRIAL AND RETAIL STORES

U. S. INDUSTRIAL RAYNSTERS®
U. S. ROYAL RUBBER FOOTWEAR
UNITED STATES RUBBER COMPANY

Gloucester Landings for July Set New Record

Huge receipts of trash fish, which is used to make and enrich animal food, helped Gloucester to establish a new monthly record of fish landings in July. The Fish & Wildlife Service shows the July estimated total to be 39,000,000 lbs. of fresh fish, with trash fish totaling 20,800,000 lbs., or 50 per cent.

Through the seven months ending July 31, Gloucester showed a total of 129,260,400 lbs. of fresh fish, 14 per cent ahead of the seven-month total for 1953. Food fish landings amounted to 92,255,600 lbs. compared to the 1953 total of 95,648,000 lbs. Ocean perch yield for the seven months is 57,753,500 lbs., which is slightly behind the 1953 total of 58,577,000 lbs.

"Western Pride" Lands Big Tuna Trip

Laden with 110,000 lbs. of tuna, the 86-ft. San Diego, Calif. tuna seiner *Western Pride*, Capt. Nicholas L. Mezin, Jr., went hard aground near the entrance to Provincetown Harbor on August 25. She was pulled off, apparently undamaged the following morning, and proceeded to Gloucester with her tuna catch, which was one of the largest ever to be landed there.

This was the first East Coast tuna trip of the *Western Pride*, which logged 5500 miles from her home port, via the Panama Canal, to Provincetown and thence to Gloucester. Gross stock of the tuna trip was some $8,000.

The tuna were caught on a 6-day trip in an area roughly 50 miles southeast of Cape Cod. The individual fish averaged approximately 50 lbs., very good canning size.

John Murray, Fish and Wildlife Service observer aboard the *Western Pride*, reported that they sighted a large number of tuna along the northern edge of Georges Bank. The crew, most of whom are experienced California tuna fishermen, estimated that many of the tuna schools contained 200 to 300 tons of tuna.

Joins Fishing Fleet

Gloucester has added a fishing boat to its fleet. She is the 61-ft. *Althea Joyce*, formerly of Rockland, Maine. Capt. Tony Parco of this port has bought her, and will take her whiting fishing.

Big Day's Landings

Gloucester boat owners, fishermen and shore workers were expected to take in $120,000 from fish receipts of August 9, one of the largest catches ever landed in one day. A fleet of 33 draggers hailed for 2,462,000 lbs. of fresh fish.

The king of the ocean perch fleet was again the *Ocean Life* reporting with 440,000 lbs. ocean perch.

New Jersey Landings for First Six Months Show Big Gain

Landings of all species of fish and shellfish at New Jersey ports for the six-month period ending with June amounted to over 144 million lbs., compared with less than 112 million lbs. landed during the same period in 1953.

The catch of fish and shellfish during June totaled 85,586,000 lbs., compared with 76,960,000 lbs. during the corresponding month of the previous year. This represents an increase of 11 percent.

The noticeable gain in production again was caused mainly by the continued success of the menhaden fleet operating off the Middle Atlantic area. Scup or porgy yields continued high during June, with landings climbing to over 1.5 million lbs.

Boston Fishermen Make Record Scrod Landings

New England trawler fishermen are landing the largest catches of scrod in the history of the fishery. This can be attributed, at least in part, to the mesh regulation which went into effect June 1, 1953.

In the period May 1 to July 31, more than 17 million pounds of scrod were landed from Georges Bank at the port of Boston. This is the largest landing of scrod from that area during this period in the history of the fishery.

The new broods of haddock that appear in the fishery each year vary in strength due to fluctuations in natural conditions out on the banks. This year's incoming recruits are very abundant due to a successful brood year in 1952 and due to the protection given them during their early growth period by the wide mesh nets.

Saltonstall Fisheries Plan Endorsed

Gov. Herter's labor-management committee to promote the Massachusetts fishing industry last month unanimously endorsed Senator Saltonstall's proposal to study the feasibility of developing a broad three-point program to strengthen the fishing industry and to integrate it with national defense.

The Saltonstall proposal embraces three major recommendations: 1. The subsidy of trawler construction with a view to the usefulness of fishing vessels for emergency service as mine sweepers and other military purposes. 2. A survey of the local fishing fleet with the aim of developing improvements of fishing vessel design. 3. A program of experimental fishing aimed at the diversification of the New England fisheries.

Joseph Macara of Provincetown, recently appointed to the Governor's committee, and John Worthington of Truro jointly presented to the labor-management committee a petition signed by the entire Provincetown whiting fleet urging a conservation measure which would require larger mesh nets to prevent destruction of small whiting.

First Swordfish Fare

Boston Fish Pier had the first fare of swordfish in two years when the schooner *Christine and Dan* arrived at the Pier on August 2 with 112 swordfish. The offered price, however, was only 30 cents per pound.

Trawlers Are Idle Due to Low Scrod Price

Thirty-five trawlers and six large draggers in the Boston fishing fleet have been tied up since the middle of August in protest against low prices on haddock scrod. Landings of scrod have been abnormally heavy the past two months, and recently the price dropped to three cents. The fishermen are asking a six-cent per pound minimum for scrod, and "broker" pay of $10 per day rather than the current $7.

The five-boat Hy Trilling fleet is continuing to operate because Bonnie Fish Co. has agreed to guarantee a minimum price of 5½ cents per pound for haddock scrod, and also "broker" pay of $10 per day.

Trilling's *Bonnie* arrived at the Fish Pier September 7 with an 11-day trip that promised to be one of the best in the port's history, and most unusual for Summertime. The gross stock for the 193,200 lbs. was estimated to be close to $20,000, while the gross share per man was expected to exceed $500. The *Bonnie* had 165,000 lbs. of haddock scrod, and was fortunate in meeting a starting price of 10¢ per pound.

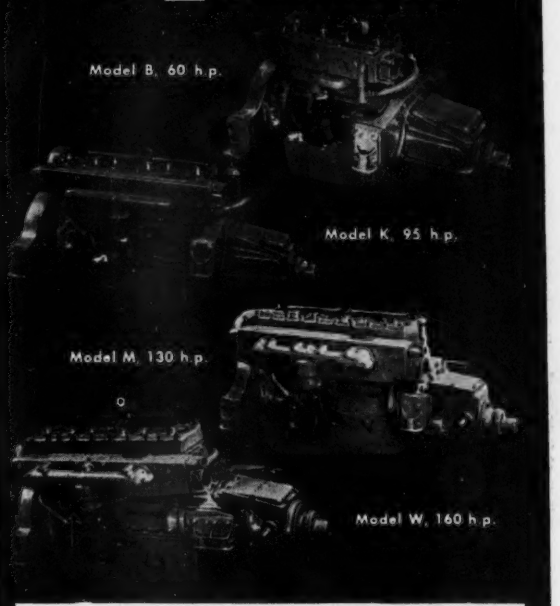
Stevens Joins Atlantic Coast Fisheries

The Atlantic Coast Fisheries Co. has announced the election of Herbert N. Stevens as vice-president in charge of sales of Nordic brand products, effective September 1. Mr. Stevens has been with General Foods Corp. for 18 years, having served from April 1951 to date as product manager seafoods, Birds Eye Division.

Chris-Craft

WORLD'S BEST BUYS IN MARINE ENGINES

for fishing boats, work boats —for any commercial use!



Thousands of people flock nightly to the Jones Beach Theatre at Wantagh, N. Y., to see a fabulous water extravaganza based on the "Arabian Nights."

One of the show's highlights is a 65-foot, fabricated, sea-going whale named S.S. Polky who stars in the story of Sinbad the Sailor. No ordinary whale, Polky is powered by a Chris-Craft Marine Engine; carries a whale-sized, three-ton load: Sinbad, his crew of sailors, assorted mermaids — about 40 people in all.

A Chris-Craft Marine Engine was chosen to power Polky because of its efficiency and dependability. For records *prove* that, horsepower for horsepower, you can't buy a better marine engine than a Chris-Craft — for smooth, dependable power; and for more years of hard service at low upkeep.

Chris-Craft Marine Engines are available in 60, 95, 105, 120, 130, 131, 145, 158 and 160 h.p. with reduction drives, opposite rotation and Chris-O-Matic for most models. See your Chris-Craft Dealer or mail coupon for catalog today! Buy NOW!

CHRIS-CRAFT CORP., MARINE ENGINE DIV., ALGONAC, MICH.

WORLD'S LARGEST BUILDERS OF MOTOR BOATS

CHRIS-CRAFT CORP., Algonac, Mich.
Send Chris-Craft Marine Engine Catalog to:

Name_____

Address_____

City_____ State_____

EQUIPMENT and SUPPLY NEWS

"Redi-Grip" Extinguishers Get CG Approval

The first U. S. Coast Guard approvals ever to be granted to stored pressure fire extinguishers of smaller capacities were announced recently by Stop-Fire, Inc. These approvals have been placed on Stop-Fire's pressurized portable "Redi-Grip" fire extinguishers. They cover "Redi-Grips" pressurized with air or nitrogen and charged with either chlorobromomethane or carbon tetrachloride as the extinguishant—1 qt., 1½ qt., 2½ qt., and also 1 gal. capacities.

Stop-Fire air-pressurized "Redi-Grip" fire extinguisher—a 1½ qt. model CBM-charged.

The extinguishers are approved for use against Class B (inflammable liquid) and Class C (electrical fires. These units, and carbon dioxide pressurized "Redi-Grips", previously have been approved by Underwriters' Laboratories Inc.

The stored pressure feature of "Redi-Grips" entirely eliminates hand pumping in fire extinguisher operation. The extinguishant, held under constant 150 psi air pressure, is instantly discharged by release of a one-hand operated valve. The pressurized discharge is forceful, carrying up to 30' regardless of the direction of discharge. A combination carrying handle and squeeze-grip operating valve makes it possible to grasp the "Redi-Grip" in one hand and then, by squeezing the grip, to release the extinguishant at once.

Other features include a patented safety pressure gauge that tells at a glance that the extinguisher is pressured, ready to go; a safety seal that prevents accidental discharge; and a plastic valve seat that acts as a positive seal against leakage.

Complete "Redi-Grip" details are presented in a new 4-page bulletin that carries illustrations and specifications of all models; data on available brackets; servicing instructions and details on available servicing accessories. Write for Bulletin RG-154, Stop-Fire, Inc., 125 Ashland Place, Brooklyn 1, N. Y.

McKay Marine Chain Products Booklet

A comprehensive handbook of the various types of chains and accessories used aboard boats and dockside is now available from The McKay Co., 410 McKay Bldg., Pittsburgh 22, Pa. The new McKay Bulletin E is literally an encyclopedia covering the subject of marine chains, attachments and accessories.

The first section of the bulletin is devoted to the wide variety of specialty chain products generally used by commercial fishing fleets. Among the items cataloged and detailed as to sizes, specifications, finishes, etc., are oyster net links, S-hooks, welded steel rings and purse seine rings. The second section is devoted to the full line of welded iron and steel chain used by the marine industry as a whole and chain used for running anchors, stowing cargo, anchoring buoys and other salt and fresh water jobs.

Complete specifications are given for stud link anchor chains from ⅝" material diameter to stud link anchor chain through 2½" diameter, together with the necessary joining links and shackles used to make up complete gear. The factory test and inspection service which The McKay Co. offers to users of stud link anchor chain also are outlined.

Bulletins on New "Safety" Generators

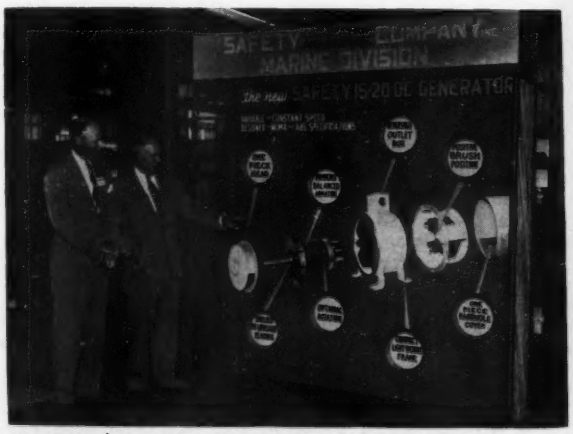
Two new bulletins have been issued recently by The Safety Car Heating and Lighting Co., Inc., P. O. Box 904, New Haven 4, Conn. One covers the new "Safety" 15-20 DC generators for marine applications, while the other describes the Safety line of generator regulators, load regulators, reverse current relays, marine generators and motor alternators.

The new Safety 15-20 DC generator line offers a wide range of capacities and speeds. The generators are for use with engine-driven power plants, and meet modern Diesel engine speed ranges. They are compact and lightweight, and can be manually or automatically controlled.

Safety generators are claimed to provide excellent commutation regardless of load and speed. They are dripproof, incorporate the use of corrosion-resistant materials and finishes, and feature shielded, pre-lubricated bearings. The Safety generators are available either for operation as flat compound constant speed generators at 1800 rpm. or as variable-speed generators.

Direction of rotation of the new generators is optional and can be reversed at the outlet box without disturbing the internal wiring or the position of the head. The outlet box is located on top of the machine, and is designed so that the conduit hole can be positioned on either side of the generator, a decided advantage in many installations.

The armature of the Safety generators is impregnated with high grade electrical varnish and baked, and coils are retained in the slots with rectangular wedges assuring coil retention under all operating conditions. Armatures are dynamically balanced. Brush boxes have spring tension units designed as separate components, accurately set at the factory for proper brush pressure.



Wade M. Wilkes, left, manager of the Marine Division, and J. J. Kennedy, vice-president, viewing the exhibit of the Safety Car Heating and Lighting Co., Inc. at the recent Oyster Convention in Boston, Mass. The display featured component parts of the new "Safety" 15-20 DC variable or constant speed generator.

A new and better rope for fishing!

ROEBLING PREFORMED

SPECIAL GALVANIZED

DOLLAR FOR DOLLAR this new Roebling Fishing Rope is the biggest value ever put on the market. It has top resistance to corrosion, *special* galvanizing protects every inch of every wire. The fibre core is impregnated with a preservative that prevents excessive absorption and reduces the harmful action of salt water, mildew and dry rot. Roebling preforming assures easier handling, smooth drum winding...and practically abolishes all tendency to kink or bend.

Make it Roebling's new Preformed Special Galvanized next time you order fishing rope. And remember that for standing rigging and every other purpose there's a Roebling wire rope for complete dependability and service economy. Call your distributor or the nearest Roebling office. They're in the yellow pages. John A. Roebling's Sons Corporation, Trenton 2, N. J.

ROEBLING (CF)

SUBSIDIARY OF THE COLORADO FUEL AND IRON CORPORATION

New Booklet on Caterpillar Diesels

"Around the Watch", new eight-page booklet presented by Caterpillar Tractor Co., Peoria, Ill., depicts the many uses of Caterpillar Diesel engines in the marine field. Boasting 12 sizes of Diesel engines, the Company includes in the book a chart on the ability of each engine when used as marine power units, marine electric sets and for marine propulsion.

The pamphlet contains photographs of many types of boats in the industry. It illustrates the fact that Caterpillar Diesel marine engines are built for "around the watch" service, with a minimum of maintenance required. A section on parts and service supplied by Caterpillar dealers completes the book.

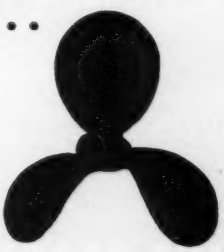
Air Compressor "Trouble Savers" Bulletin

Locating troubles in vertical water-cooled air compressors is the subject of a new "Trouble Savers" self-mailer now being offered by the Worthington Corp. The mailer is one of a series of "Trouble Savers" on preventive maintenance being issued by Worthington to assist in reducing operation costs.

It is designed to help operators of YC and DYC compressors detect existing troubles in their unit and be alert to ways in which these troubles can be prevented. Graphically illustrated, it clearly explains reasons for such operating troubles as failure to deliver air; insufficient capacity; insufficient pressure; vibration; overheating; overloading motor; knocks; low or high intercooler pressure.

For copy of Vertical Water-Cooled Air Compressor "Trouble Savers" write to Advertising and Sales Promotion Dept., Worthington Corp., Harrison, N. J., specifying mailer L-676-M1. If complete series covering centrifugal, rotary, regenerative turbine and steam pumps and water-cooled and air-cooled air compressors is desired, specify mailers PC-305 and PC-306.

EXPERT RECONDITIONING ON PROPELLERS OF ALL SIZES . . .



PRECISION EQUIPMENT and expert workmen insure an accurate repair job. We guarantee our work. Estimates gladly furnished. Send your damaged propeller to us for free inspection and report.

HYDE WINDLASS COMPANY

BATH, MAINE

HYDE

PROPELLERS

The CRUISE MASTER

An Ideal Compass for smaller boats

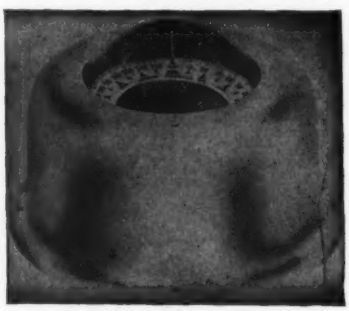
4" Spherical

Indirect Lighting

Built-in Compensator

Chrome Plated Base

Price $39.00



For Larger Boats Get Our

6-inch FLOAT TYPE COMPASS

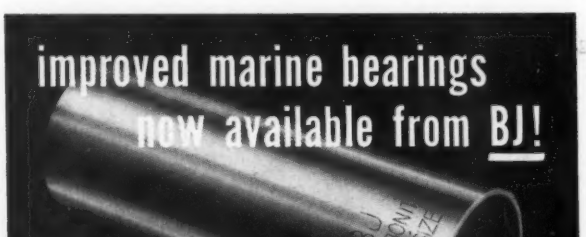
Quality Instruments You Can Depend On

Compasses - Course Protractors - Binnacles - Peloruses

Write for descriptive folder

MARINE COMPASS COMPANY

Pembroke, Massachusetts



- For all standard shaft sizes from 3/4" through 3"
- Molded resilient rubber — bonded to a heavy brass case

PROMPT SERVICE...QUICK DELIVERY

BJ MARINE BEARINGS are backed by Byron Jackson's years of experience in specialized rubber applications. And BJ's 82-year-old record of customer-satisfaction assures you of uniform high quality, dependable delivery and service.

Contact your nearest marine supply dealer or write for Bulletin No. 54.

PB DIVISION

Byron Jackson Co.

P.O. Box 2493, Terminal Annex, Los Angeles 54, Calif.

Paul G. Wellenkamp, who has been elected executive vice-president and general manager of The Marine Manufacturing and Supply Co., New Brunswick, N. J. Formerly chief engineer and assistant to the president of the Vitro Corp. of America, Mr. Wellenkamp brings a wealth of engineering and production experience to Marine Manufacturing, a 103-year-old company which specializes in deck machinery, marine hardware and Shipmate galley ranges. Mr. Wellenkamp is a graduate of Cornell University.

Gorton-Pew, New National Supply Distributor

Gorton-Pew Fisheries Co., Ltd., Gloucester, Mass., has been appointed distributor in Massachusetts, Rhode Island and Maine for the Engine Division of The National Supply Co. The Company will take over the duties formerly handled by National Supply's branch office in Gloucester in connection with the sales and service of Superior, Atlas and Lister Diesels for marine use.

B. D. Fish continues as branch manager in the New England territory. Spencer A. Dagle, associated for many years with Atlas Imperial Diesel, is now with Gorton-Pew and will continue to be available in a sales and service capacity.

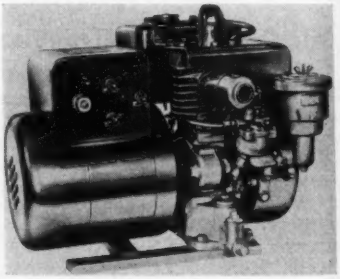
Roebling "Blue Center" Wire Rope Leaflet

An attractive two-color bulletin issued recently by John A. Roebling's Sons Corp., Trenton 2, N. J., describes and pictures their new "Blue Center" steel fishing boat rope for purse seining, gill netting and trawling. The constructions and commonly-used sizes of Roebling "Blue Center" wire rope are shown in table form.

Special galvanizing by an improved method gives each individual wire in the new Roebling steel fishing boat rope extra resistance to corrosion. The rope is preformed for smooth drum winding and high resistance to bending over sheaves, blocks and drums.

The new wire rope for commercial fishing begins with "Blue Center" steel, an exclusive Roebling development, made in their own steel mills for the purpose of providing high-grade steel rope wire. The fiber core of each Roebling steel rope is impregnated with a preservative that resists excessive absorption and withstands the destructive action of salt water, fungi, mildew and dry rot.

New Universal 32-Volt Battery Charger



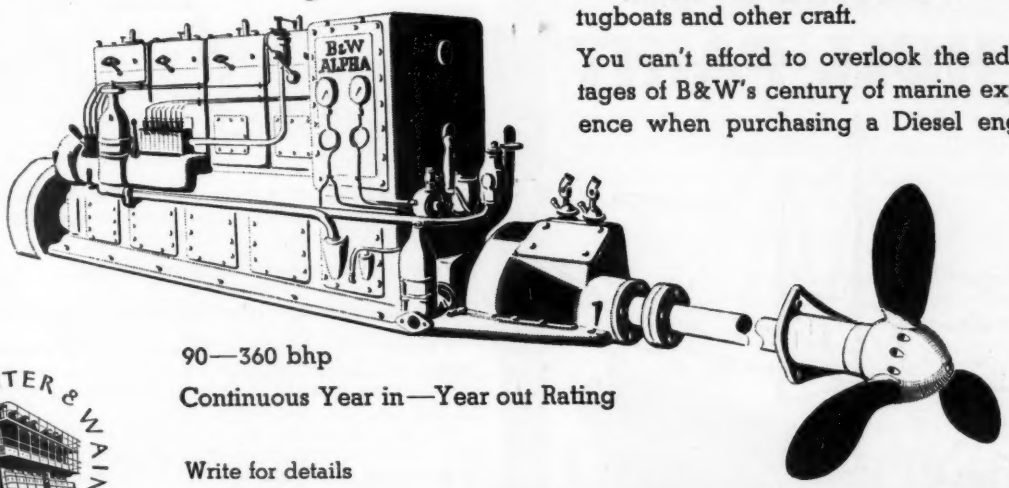
Universal Model 21-MS battery charger, rated 1000-1200 watts.

To answer the need for a small battery-charging set to handle the requirements of Diesel engine starting batteries, Universal Motor Co. now has a newly-designed 1000-watt model in production. Designated Model 21-MS, this new low-priced unit is rated at 1000-1200 watts, 32-40 volts, direct current for battery charging. It is of ample capacity for maintaining lighting batteries as well as engine-starting batteries.

Of small size for its output, the battery charger measures only 18 3/16" in length and 15 5/8" in width. It has a height of 14 1/8", while weight is 95 lbs.

The Model 21-MS is powered by a single-cylinder, air-

B&W Alpha



IT'S NO ACCIDENT!

More Burmeister & Wain Diesel Horsepower is being sold for motorships than any other make in the world. B&W's unequalled experience in building marine power is fully utilized in its manufacture of heavy-duty engines for fishing vessels, tugboats and other craft.

You can't afford to overlook the advantages of B&W's century of marine experience when purchasing a Diesel engine.

90—360 bhp

Continuous Year in—Year out Rating

Write for details

BURMEISTER & WAIN AMERICAN CORPORATION

17 Battery Place, New York 4, N. Y.

BURMEISTER & WAIN AMERICAN CORPORATION

cooled, 4-cycle gasoline engine direct coupled to the generator. It is fully equipped for safe service aboard boats of all sizes and has push-button electric starter switch, reverse current relay, and battery ammeter for indicating charging rate. These are contained in a convenient control box mounted above the generator. There is an adjustable rheostat for regulating the battery-charging current from 15 to 30 amperes.

Complete information on the new battery charger is available by writing the manufacturer, Universal Motor Co., 529 Universal Drive, Oshkosh, Wis. Ask for Bulletin DME-1.

Gifford-Wood Bulletin on Ice Breakers

A 20-page bulletin, offered by the Gifford-Wood Co., Hudson, N. Y., pictures and describes the complete line of G-W ice breakers, ice sizing, and auxiliary equipment.

The first section of the bulletin covers breakers. It includes detailed descriptions of four types of G-W drums and nine models of breakers with capacities ranging from 3 to 50 tons per hour. Specifications include: hopper size, capacity, floor space, height to feed plate, number of picks, number of teeth in the coarse and fine combs, hp. of motor, drum speed and average weight. Also covered are drive mechanisms, size control, materials of construction and chute connections.

Continuing, the bulletin covers four types of ice sizing plants and gives design features, bin capacities and elevator heights in detail.

New Canaplin Stitching and Sewing Twine

The new Canaplin stitching and sewing twine, which is said to offer high strength, long yardage and resistance to abrasion, is now available from South Eastern Cordage, N. B. C. Building, Cleveland 14, Ohio. No. 306 Canaplin stitching twine tests approximately 69 lbs., tensile, 1700 ft. in yardage. It is put up in ½-pound balls and 2-pound tubes in individual boxes, twelve boxes to the carton.

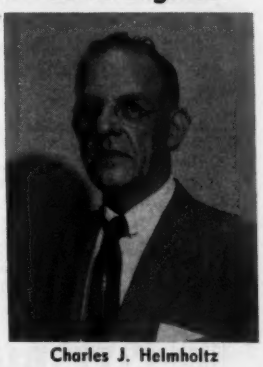
Selected natural fibers and special blending are features of the new low-priced stitching twine. Variations in yardage and tensile can be made to specification.

Spoon Bright Stops Trolling Spoon Rust

Spoon Bright, a new product offered by Sudbury Laboratory, South Sudbury, Mass., is claimed to prevent tarnishing, rust and corrosion of trolling spoons. A liquid put up in 8 oz. bottles, Spoon Bright is useful in both commercial and sport fishing operations. By keeping hooks, spoons and swivels in fresh water to which Spoon Bright has been added, salt water corrosion is eliminated.

Helmholtz Appointed Onan Sales Engineer

D. W. Onan & Sons, Inc., Minneapolis, Minn., manufacturer of electric generating plants, has announced the appointment of Charles J. Helmholtz of West Medford, Mass., as Direct Factory Sales Engineer covering the New England States. Mr. Helmholtz, formerly Manager of Dealer Sales Division, Boston branch, Fairbanks, Morse & Co., has been active in sales work throughout his entire career. He had been associated with Fairbanks-Morse for over 34 years.



Charles J. Helmholtz

Headquarters for Mr. Helmholtz will be in West Medford, Mass., but he will spend the majority of his time working directly with Onan distributors and dealers in the field.

You Can't Get
Better Paint Protection!
Pittsburgh
HULL PAINT

It's really fume-resistant!

YEARS OF satisfactory experience have caused builders and operators of fishing craft in all parts of the country to recognize Pittsburgh Hull Paint as *paint protection plus!*

Sun, wind, rain, ice and salt spray have little effect on this rugged coating. It is remarkably *fume-resistant* . . . fuel fumes, foul water and industrial gases will not discolor it.

Pittsburgh Hull Paint brushes on easily, hides thoroughly and dries rapidly to its extra-durable finish. It can be scrubbed repeatedly without harming its tough surface.

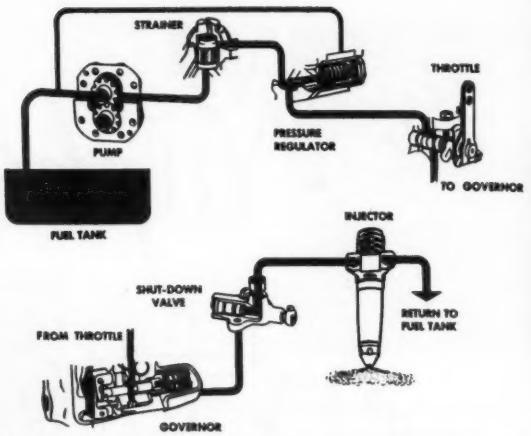
Write for our free booklet describing the complete line of Pittsburgh Marine Finishes. It may well save you both time and money.

IMPORTANT NOTICE TO SHIP CHANDLERS

Although Pittsburgh Marine service covers most important ports, we have a few opportunities for ship chandlers. If you are interested in handling a high-quality line of finishes for every marine need, write, wire or phone factory nearest you.

PITTSBURGH PLATE GLASS CO., Industrial Paint Div., Pittsburgh, Pa. Factories: Milwaukee, Wis.; Newark, N.J.; Springdale, Pa.; Atlanta, Ga.; Houston, Texas; Torrance, Calif.; Portland, Ore. Ditzler Color Div., Detroit, Michigan. Thresher Paint & Varnish Division, Dayton, Ohio. Forbes Finishes Division, Cleveland, Ohio. M. B. Suydam Div., Pittsburgh, Pa.

PITTSBURGH PAINTS
PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS
PITTSBURGH PLATE GLASS COMPANY
IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



Schematic Cummins PT fuel flow diagram. This shows pressure regulator, throttle and governor in full horsepower operating positions.

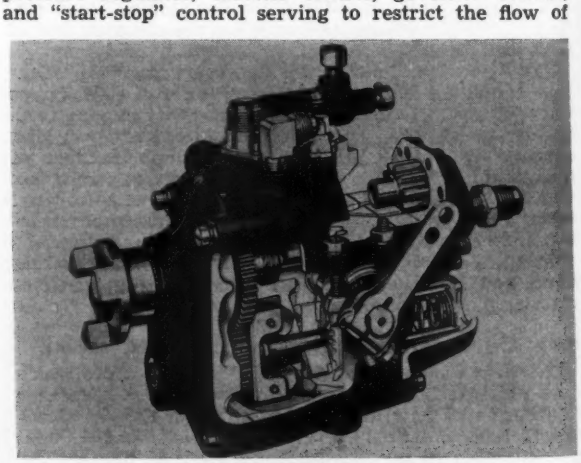
Cummins Introduces Simplified Diesel Fuel Injection System

A greatly simplified fuel system, making Diesel fuel injection as uncomplicated as gasoline engine carburetion and ignition systems, has been announced by Cummins Engine Co., Inc., Columbus, Indiana.

The new development, designated as the Cummins PT fuel injection system, completely eliminates fuel rack adjustments, high and low pressure check valves, spring loaded needle valves, helixes, distributor discs, metering pumps, high pressure fuel lines, and the necessity for timing the fuel pump to the engine. The new system is now standard equipment on all models of Cummins Diesel engines and can be applied to all Cummins Diesels built since 1932.

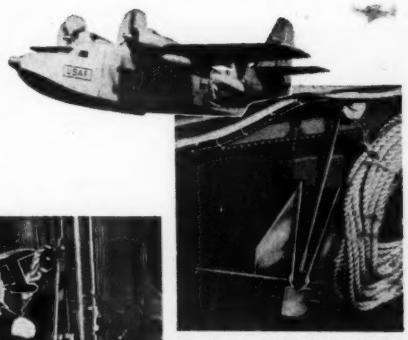
It is claimed that the average mechanic can easily understand the workings of the PT fuel system in a few hours. Therefore, Cummins believes that it will no longer be necessary for Diesel service shops to maintain fuel pump specialists as have been required in the past.

By making use of a simple type of fluid metering device—a fixed orifice with a variable fuel oil pressure behind it—Cummins has improved the entire fuel injection system. The metering orifice is now a part of the fuel injector located in the cylinder head, thus adding the metering function to the injector. Although the injector now serves the dual purpose of metering and injecting the fuel, the construction and servicing of the injectors has been greatly simplified. The once complicated fuel pump has become merely a source of fuel pressure with a pressure regulator, throttle control, governor control, and "start-stop" control serving to restrict the flow of

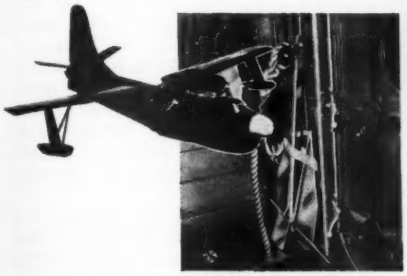


Cutaway version of the Cummins PT fuel pump.

Convair's R3Y Tradewind is the fastest cargo-transport flying boats ever built . . . she speeds along at better than 350 MPH. Wingspan is about 145 feet.



The Grumman SA-16 is a triple-threat Air Rescue aircraft which allows the pilot to "air-select" the correct gear for landing on land, water, snow or ice.



One of the Navy's deadliest anti-submarine weapons is the Martin P5M-1 Marlin, powered by two Wright turbo-compound engines of 3250 HP each.

U. S. SEAPLANES CARRY DANFORTH *Hi-Tensile* ANCHORS

Our various air commands, too, recognize one basic fact about anchors: *there is more security in every pound of Danforth anchor than in any other anchor made.* That is another way of saying that a Danforth anchor will hold more, pound for pound, than any other anchor. Why not equip *your own boat* with safe, easy-to-handle Danforth anchors—now. All good marine dealers have them in stock.

"Anchors and Anchoring" is free to you! This 16-page booklet is an informative illustrated manual which should be aboard every boat. Just send us your name and address.

DANFORTH® ANCHORS

2137 ALLSTON WAY, BERKELEY 4, CALIF.

fuel and so varying the fuel pressure at the metering orifice.

Injector plungers are operated from lobes on the main engine camshaft and control the timing of the engine, as has been the case in the past. However, since the timing is controlled by the engine camshaft, the Cummins PT fuel system need not be timed to the engine.

The PT fuel system has only 13 per cent of the bulk of the Cummins distributor type fuel pump introduced in 1932. Weight of the new system is only 13 lbs., as compared to 104 lbs. for the earlier pump. The total number of parts in the PT fuel system has been reduced to 182 as compared to 415 in the former disc type pump.

Briefly, the new Cummins PT fuel system operates as follows:

A gear pump picks up the fuel from the fuel tank, creating the basic fuel pressure for the system. This pressure is then controlled by a pressure regulator which is designed to control the maximum pressure in the system and give the proper torque and horsepower characteristics. The fuel pressure from this regulator is controlled by simple throttle control and governor control valves, and an "on and off" shutdown valve.

From this point the fuel flows from the fuel pump to a common manifold leading to each of the injectors located in the engine cylinder head. The pressure from the fuel pump is applied to the metering orifice in the injectors and depending upon the pressure in the manifold more or less fuel is metered through the orifice into the injector cup in the top of the engine combustion chamber. At the proper time for firing, the injector plunger is forced down by the action of a cam on the main engine camshaft, forcing the metered fuel through the spray holes in the injector cup.

Since all injectors are connected to the common manifold, all receive the same pressure and equal charges of fuel are injected into each of the engine's cylinders, assuring that each cylinder develops equal power without the necessity for individual adjustment of each injector.

Enterprise Engine Expansion Program

An extensive expansion program is underway at Enterprise Engine & Machinery Co., subsidiary of General Metals Corp., San Francisco. Plans call for broadening of product lines, development of new products, and augmentation of the national sales staff.

Enterprise now will build power units up to 5,000 hp.; heretofore, the largest ratings were 2700 hp. Improved engine efficiency is being developed as well. New products to be announced later are now in the developmental stage.

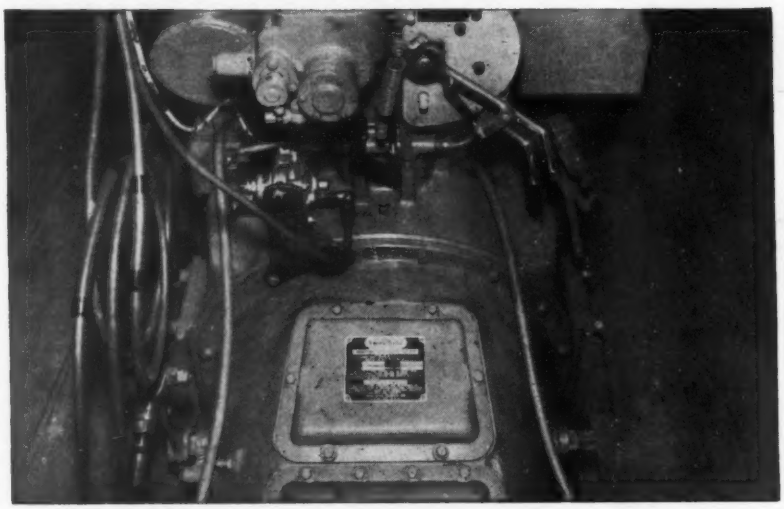
Five new men have been added to the national sales force, according to P. I. Birchard, vice president and manager. These are George M. Anger, Allen H. Hogue and Robert Hills, who will operate as sales engineers out of the San Francisco office. Roy E. Hoffmann has been appointed to head the newly established Jacksonville, Florida office, and R. T. Bauman has been added as a sales engineer to the Boston branch staff. George A. Cashman, sales engineer in the San Francisco office since 1949, will be transferred to work in the Seattle territory. Other sales engineers will be added in the near future to enlarge further the firm's national sales organization.

Purolator Offers New Marine Fuel Filter

A new marine fuel filter which provides for exceptionally fine filtration has been placed on the market by Purolator Products, Inc. Resulting from extensive research by Purolator engineers, the new filter can be used with either Diesel or gasoline marine engines.

The Purolator marine filter stops gas tank condensation from reaching the carburetor; it prevents scale or rust from the gas tank from reaching the engine; and it protects against valve warpage, makes for easier starting and prevents engine stalling and roughness from gas tank condensation.

A complete kit, ready to install, is available from Department A, Purolator Products, Inc., 970 New Brunswick Ave., Rahway, N. J.



11,000 hours on Twin Disc Marine Gears without a minute out for repairs

New steel tugs may be stealing the show these days in oilfield towing operations . . . but Easton Pellegrin of Chauvin, La., is still racking up a top-notch towing reputation with his three older tugs built of sturdy cypress.

There's more than meets the casual observer's eye, however, to Pellegrin's "Lachache", "Lasalle" and "Defense". Down in the holds are Murphy 190 Diesels . . . and on each Murphy is a Twin Disc Model 200 Marine Gear and a Twin Disc Front Power Take-Off . . . *all racking up records of their own. Not one minute out for repairs* has been spent on any of the Twin Disc Drives—and the "Lachache" alone has over 11,000 hours of operation, including such jobs as 43 consecutive hours without going below 1,165 rpm. Small wonder Mr. Pellegrin made sure his newest re-power installation—in the "Defense"—included Twin Disc Drives.

Write Twin Disc *today,* and get *complete* information on Marine Gears for boats from 40 to 340 hp, 600 to 2500 rpm . . . with *exclusive features offered,* including Rubber Block Drive and Fluid Coupling Drive.

TWIN DISC

TWIN DISC

TWIN DISC CLUTCH COMPANY, Racine, Wisconsin
Hydraulic Division, Rockford, Illinois

Rhode Island Is Transplanting Quahogs

State-hired dredgers transplanted 999 bushels of quahogs on August 19 during the second day of "Operation Transplant". The quahogs were taken from the waters of the Providence River to areas of upper Narragansett Bay. When the Bay's waters have cleaned the quahogs—a process that should take about two weeks—the newly-planted beds will be opened to shellfishermen.

On the first day of the operation 819 bushels were transplanted, and John L. Rego, director of the State Dept. of Agriculture and Conservation, said the work would continue as long as the $25,000 appropriation lasts.

Among those engaged in the work are Howard Winsted of Warwick Neck; Walter A. Rayhill of Apponaug; Gilbert M. Brownell of Newport; George H. Sylvia of Little Compton; Alfred J. Brownell of Newport; Manuel Souza of North Tiverton; Antone Sousa of Warren; Antone Tavares of Portsmouth; Romulus Saccoccio of Providence and Franklin E. Brow, Jr., Edgar A. Gray, Jr., William Danuo, Joseph Cavaca, Arthur A. Lopes and Clinton G. Smith, Jr., all of Tiverton.

New Conservation Officers

A policy of further curbing of shellfish law violations in Narragansett Bay recently was pledged by John L. Rego, State Director of Agriculture and Conservation. Rego said he would immediately appoint six new conservation officers on a temporary basis to augment fish and game division patrols over the area into which thousands of bushels of quahogs are being transplanted.

Beds Opened for Quahogging

The B. J. Rooks & Sons Oyster Co. of Warren has opened up 60 acres of oyster ground off Longmeadow to shellfishermen for licensed quahogging. Philip Thompson, manager of the Warren firm, said that the grounds not now in use for oyster farming will remain open for quahogging as long as the process is orderly and the registration system is used by the fishermen.

The quahoggers are registered for $5 a month and receive a license card from Thompson. They pay the company 25 cents a bushel.

Rain Curtails Quahogging

The heavy rainfall early last month forced a sharp curtailment in the operations of the shellfish industry in Bristol County, and as a consequence, the surplus of quahogs decreased appreciably. The Blount plant in Warren had been working overtime in an effort to keep pace with the supply, but the sharp drop due to the rain enabled the concern to return to normal operations.

BOAT CATCHES

For Month of August

Hailing fares. Figure after name indicates number of trips.

ROCKLAND

Althea Joyce (2)	62,000	Jeanne D'Arc (2)	92,000
Calm (2)	620,000	Mabel Susan (3)	103,200
Catherine & Mary (1)	72,400	Ocean (3)	920,000
Crest (2)	580,000	Rhode Island (1)	35,000
Dora-Peter (3)	106,500	Squall (1)	300,000
Dorothy & Ethel II (2)	53,000	Storm (2)	620,000
Drift (2)	600,000	Surf (2)	600,000
Elin B. (4)	103,000	Tide (2)	600,000
Flo (1)	38,000	Wave (2)	625,000
Helen Mae II (3)	102,000		

GLOUCESTER

Admiral (3)	233,000	Malolo (1)	60,000
Alden (1)	30,000	Manuel P. Domingos (2)	325,000
Althea Joyce (2)	35,000	Margaret Marie (9)	173,000
American Eagle (9)	223,500	Margie L. (6)	67,000
Anna Guarino (8)	58,500	Maria Immaculata (11)	153,800
Annie (10)	49,300	Maris Stella (2)	320,000
Annie II (2)	11,200	Mary (17)	151,700
Annie & Josie (4)	53,000	Mary Ann (7)	234,500
Anthony & Josephine (7)	107,000	Mary E. (5)	17,000
Atlantic (4)	189,000	Mary Jane (3)	490,000
		Mary Rose (1)	160,000
Bobby & Jack (1)	46,000	Minkette 1st (1)	500
Bonaventure (2)	320,000	Mother Ann (2)	465,000
California (4)	235,000	Natale III (6)	270,500
Cara Cara (1)	125,000	No More (4)	18,000
Carlannsul (6)	60,000	Nova Luna (1)	5,500
Carlo & Vince (9)	160,000	Novelty (8)	100,500
Catherine (4)	7,000		
Catherine B. (3)	97,000	Ocean Clipper (3)	77,000
Chanco (3)	350,000	Ocean Life (2)	840,000
Charlotte M. (2)	270,000	Ocean Spray (3)	140,000
Cherokee (4)	285,000	Our Lady of Fatima (2)	430,000
Cigar Joe (3)	52,000		
Clipper (2)	300,000	Philip & Grace (2)	270,000
Columbia (2)	400,000	Pilgrim (2)	330,000
Curlew (1)	125,000	Pilhasca (6)	109,000
		Pioneer (8)	86,500
Dawn (10)	53,000	P. K. Hunt (2)	235,000
Doris F. Amero (2)	45,000	Powhatan (3)	103,000
		Priscilla (4)	6,500
Eagle (1)	195,000	Puritan (2)	290,000
Eddie & Lulu M. (9)	55,100		
Edith L. Boudreau (2)	71,000	Rose & Lucy (8)	271,000
Emily H. Brown (2)	385,000	Rosemarie (3)	41,000
Etta K. (1)	8,000		
Eva II (7)	31,700	Sacred Heart (8)	95,500
Evelina M. Goulart (1)	56,500	St. Ann (1)	180,000
		St. Anthony (2)	310,000
Falcon (9)	124,000	St. Cabrini (4)	236,000
Florence & Lee (2)	320,000	St. Francis (9)	124,600
Flow (2)	540,000	St. John (9)	38,500
Frances R. (6)	123,000	St. Joseph (7)	322,000
Francis L. MacPherson (2)	315,000	St. Mary (7)	170,000
Frankie & Jeanne (5)	39,100	St. Nicholas (2)	365,000
		St. Peter (6)	240,000
Giacoma (6)	37,500	St. Peter II (1)	150,000
Golden Eagle (1)	115,000	St. Providenza (13)	103,500
		St. Rosalie (1)	13,000
Helen B. (5)	212,000	St. Therese (6)	140,000
Hilda Garston (2)	240,000	Salvatore & Grace (1)	15,000
Holy Family (2)	335,000	Sea Hawk (2)	290,000
Holy Name (8)	130,000	Sea Queen (2)	104,000
		Sea Rambler (2)	130,000
Ida & Joseph (4)	300,000	Sebastiana C. (2)	38,000
Immaculate Concepti'n (7)	116,000	Serafina N. (7)	265,000
		Serafina II (7)	237,000
Jackie B. (1)	32,000	Sister Ann (1)	170,000
Jackson & Arthur (10)	84,500	Star of the Sea (3)	182,000
J. B. Junior II (3)	40,000	Stella Maris (5)	159,000
Jennie & Lucia (2)	73,000	Sunlight (2)	370,000
Joe D'Ambrosio (2)	10,500	Sylvester F. Whalen (2)	325,000
Johnny Baby (10)	54,000		
Joseph & Lucia (2)	300,000	Theresa M. Boudreau (1)	200,000
Joseph S. Mattos (2)	430,000	Tipsy Parson (3)	23,000
Josie II (4)	30,500	Trimembral (2)	17,300
Judith Lee Rose (2)	395,000		
		Veronica N. (7)	29,700
Kingfisher (2)	400,000	Victoria (2)	2,500
		Villanova (2)	465,000
Lady of Good Voyage (3)	162,000	Vincie N. (1)	1,600
Linda B. (8)	25,500	Virginia Ann (6)	89,000
Little Flower (7)	154,000		
Little Joe (3)	79,200	Western Pride (1)	110,000
Lucy Scola (9)	144,000	We Three (2)	26,000
		White Owl (4)	29,500
Madame X. (5)	28,000	Whitestone (3)	191,000
Madonna Di Siracusa (2)	6,600	Wild Duck (2)	240,000

Scallop Landings (Lbs.)

Brother Joe (1)	3,000	Skilligolee (1)	9,000

Cost of Fish
vs.
Cost of Paint

Just consider what the antifouling properties of a good bottom paint can do for you. A clean hull drives easily. A foul hull can use up to 10% more fuel. A clean hull gets you where the fish are, quicker, and gives you more time for fishing. Now consider the lasting qualities of the bottom paint. Longer time between haul-outs, lower cost for painting per year and more worktime for your vessel. This all adds up to the reason why you should use "SUPER-TROP" Antifouling Bottom Paint made by International Paint Company, Inc., specialists for over 70 years in the making of Marine Paints. Send for free descriptive folder.

FOR METAL BOTTOMS

INTERNATIONAL has developed a combination of a primer and an antifouling paint that offers the maximum protection and preservation of metal bottoms. Send for the two circulars, "SILVER PRIMOCON" and "SUPER-TROP"

International
BOTTOM PAINTS

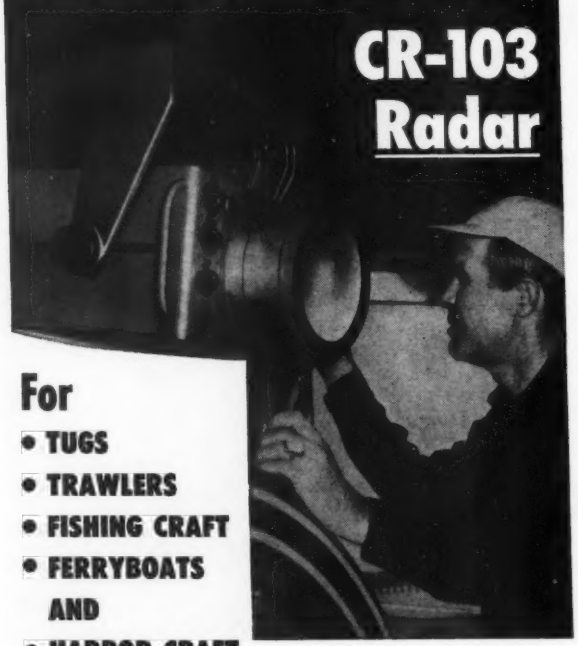
International Paint Company, Inc.
21 West Street, New York 6, N. Y.
So. Linden Avenue, So. San Francisco, Calif.
1145 Annunciation Street, New Orleans, La.

International Paints (Canada) Ltd.
6700 Park Avenue, Montreal, Quebec
105 West, 2nd Avenue, Vancouver, B. C.

WORLD'S LARGEST MARINE PAINT MAKERS

RADIOMARINE®

CR-103 Radar



For

- **TUGS**
- **TRAWLERS**
- **FISHING CRAFT**
- **FERRYBOATS AND**
- **HARBOR CRAFT**

This compact, reliable Radiomarine Radar enables vessels to operate on schedule regardless of weather. It offers all the advantages of modern radar for pilotage at sea, in harbor, or on inland waterways. Ideal for position finding . . . as an anti-collision aid . . . for detecting storms.

The 7-inch scope gives the skipper a clear and sharp picture of navigational situations around the vessel at ranges of 1, 3, 8 and 20 miles, with a close-in range of 75 yards.

Despite its compactness, Radiomarine Radar CR-103 has a 30-kilowatt transmitter, operating on a wave length of 3.2-centimeters.

Investigate the possibilities of Radiomarine Radar for safety and economy of operation for your craft.

Trnks. ®

RCA ®

Write for Complete Information—Today

RADIOMARINE CORPORATION of AMERICA

A SERVICE OF RADIO CORPORATION OF AMERICA

75 VARICK STREET, NEW YORK 13, N. Y.

STONINGTON, CONN.

America (16)	23,900	Lt. Thos. Minor (1)	3,800
Averio (9)	7,000	Lisboa (11)	9,400
Bette Ann (9)	19,800	Little Chief (13)	11,500
Carl J. (10)	50,300	Marise (17)	24,100
Carolyn & Gary (14)	24,600	Mary A. (13)	22,200
Catherine (11)	15,000	Mary H. (11)	4,300
Connie M. (14)	25,000	Old Mill (12)	16,200
Fairweather (15)	30,700	Pvt. Frank Kessler (1)	4,500
Five Sisters (5)	6,900	Rita (6)	23,900
Irene & Walter (16)	20,600	Russell S. (7)	48,100
Jane Dore (8)	10,300	William B. (16)	27,500

NEW BEDFORD

Adventurer (5)	82,500	Katie D. (4)	224,500
Anastasia E. (3)	45,000	Kelbarsam (3)	20,000
Annie Louise (3)	13,000		
Annie M. Jackson (2)	25,500	Lera G. (1)	4,200
Antonina (3)	43,400	Little Lady (1)	2,000
Arnold (4)	42,700	Louis A. Thebaud (2)	34,500
Arthur L. (3)	62,400		
Automatic (2)	6,000	Mary & Joan (3)	69,500
		Mary Tapper (3)	82,500
Barbara (3)	40,500	Morning Star (1)	1,800
Barbara M. (3)	40,000		
		Noreen (3)	195,500
Carl Henry (4)	73,500		
Chas. E. Beckman (3)	18,400	Pauline H. (3)	240,900
Charlotte G. (4)	73,100	Phyllis J. (5)	36,800
Christina J. (3)	120,500	Prosperity (2)	6,200
Connie F. (2)	54,600		
		Question (2)	10,500
Dauntless (4)	54,500		
Driftwood (2)	10,600	Roann (3)	30,300
		Roberta Ann (2)	50,000
Ebenezer (4)	23,200	Rosemarie V. (2)	31,700
Elva & Estelle (4)	51,500	R. W. Griffin, Jr. (2)	33,000
Elva L. Beal (1)	6,000		
Ethel C. (2)	57,500	St. Ann (3)	73,100
Eugene & Rose (2)	29,200	Sea Fox (5)	67,800
Eunice-Lilian (1)	28,000	Sea Hawk (245265) (3)	28,900
		Sea Hawk (Boston) (241196) (1)	26,000
Falcon (3)	78,300	Shannon (3)	61,000
Felicia (3)	170,700	Smilyn (1)	22,500
		Solveig J. (4)	211,700
Gladys & Mary (4)	133,500	Sonny & Joyce (3)	10,500
Growler (3)	69,200	Stanley B. Butler (2)	154,500
		Sunbeam (3)	60,000
Harmony (1)	16,200	Susie O. Carver (4)	17,700
Hope II (3)	92,500		
		Teresa & Jean (1)	64,000
Idlewild (1)	3,800	Two Brothers (3)	13,000
Idlewild II (1)	2,300		
Invader (4)	161,700	Venture 1st (3)	116,000
Ivanhoe (3)	76,500	Victor Johnson (4)	65,200
		Viking (5)	163,500
Jacintha (2)	120,000	Viking (Chil) (1)	3,800
Jeannie Anne (2)	11,100		
J. Henry Smith (4)	27,000	Whaler (3)	158,500
Joan & Ursula (3)	58,800	Winifred M. (3)	23,400
Julia K. (3)	10,700		

Scallop Landings (Lbs.)

Agda (2)	21,050	Louise (3)	33,000
Aloha (3)	33,000	Lubenray (2)	22,000
Alpar (3)	33,000		
Amelia (2)	22,000	Malene & Marie (2)	22,000
		Maridor (2)	22,000
Babe Sears (2)	22,000	Marmax (2)	22,000
B. Estelle Burke (1)	11,000	Martha E. Murley (3)	24,100
Bobby & Harvey (3)	33,000	Mary Anne (2)	22,000
Brant (2)	22,000	Mary Canas (1)	4,200
Bright Star (2)	22,000	Mary E. D'Eon (1)	11,000
Brother Joe (3)	23,500	Mary J. Hayes (2)	21,500
		Mary J. Landry (2)	21,000
Cap'n Bill (2)	18,800	Mary R. Mullins (3)	32,700
Carol & Estelle (3)	24,600	Mayflower (1)	5,500
Catherine & Mary (2)	22,000	Moonlight (2)	22,000
Charles S. Ashley (2)	22,000	Muskegon (2)	19,000
Dartmouth (2)	22,000	Nancy Jane (1)	11,000
Debbie & Jo-Ann (2)	22,000	New Bedford (2)	22,000
Doris Gertrude (2)	22,000	Newfoundland (3)	33,000
Dorothy & Mary (3)	33,000	Norseman (1)	3,200
		North Star (2)	16,000
Eleanor & Elsie (2)	17,625		
Elizabeth N. (2)	20,000	Pearl Harbor (2)	21,500
Eunice-Lilian (1)	10,500	Pelican (3)	33,000
		Porpoise (2)	19,200
Fairhaven (3)	33,000		
Flamingo (2)	22,000	Red Start (2)	22,000
Fleetwing (3)	33,000	Richard Lance (2)	16,500
Friendship (2)	17,500	Rosalie F. (2)	22,000
Friendship II (2)	20,500	Ruth Moses (3)	33,000
Gambler (1)	11,000	Sea Ranger (2)	22,000
Janet & Jean (2)	22,000	The Friars (3)	33,000
Jerry & Jimmy (2)	22,000		
John G. Murley (3)	33,000	Ursula M. Norton (2)	22,000
Kingfisher (2)	22,000	Vivian Fay (3)	33,000
Lauren Fay (2)	22,000	Wamsutta (2)	22,000
Linda & Warren (2)	11,800	Wm. D. Eldridge (3)	33,000
Linus S. Eldridge (3)	32,500	Wm. H. Killigrew (2)	22,000

Swordfish Landings (No. of Fish)

Gertrude D. (1)	116	Sonny & Joyce (1)	1

NEW YORK

Dolphin (1)	20,500	Two Brothers (4)	55,500

Scallop Landings (Lbs.)

Barbara & Gail (2)	22,000	Miriam A. (2)	20,900
Beatrice & Ida (2)	20,900	Nellie Pet (3)	32,330
Carol-Jack (2)	22,000	Norseman (1)	13,437
Catherine C. (2)	22,000	St. Rita (3)	24,625
Enterprise (2)	22,200	S. No. 31 (2)	21,800

WOODS HOLE

Annie Louise (1)	1,800	Lera G. (2)	13,900
Automatic (1)	4,100	Liberty (2)	1,100
Bluefin (1)	2,900	Little Lady (4)	5,700
Carl J. (1)	1,700	Madeline (2)	4,500
Clara C. (2)	3,000	Morning Star (4)	8,800
Dorothy & Everett (1)	2,000	Prosperity (1)	2,500
Eugene H. (2)	43,400	Reliance (1)	1,600
Four Brothers (1)	1,600	Susie O. Carver (1)	1,400
4-R-683 (1)	700		

Scallop Landings (Lbs.)

Lubenray (1)	4,500	Palestine (2)	19,725
Mary E. D'Eon (1)	10,125		

Swordfish Landings (Lbs.)

Bozo (1)	5,300	Ingrid (1)	600
Cap'n Bill II (1)	11,972	Papoose (1)	4,900
Carrie M. (1)	600	Southern Cross (1)	7,100
Dorothy & Everett (1)	1,400	Three Bells (1)	4,800

BOSTON

Acme (4)	87,000	Maine (2)	266,100
Addie Mae (4)	73,000	Malolo (2)	73,000
Agatha & Patricia (4)	228,500	Manuel F. Roderick (2)	106,500
Alphonso (3)	15,200	Maria Christina (5)	23,300
Angie & Florence (5)	118,800	Maria Del S. (4)	42,000
Atlantic (1)	138,700	Mary & Jennie (4)	56,000
Ave Maria (3)	144,100	Michigan (2)	189,600
		Mother Frances (3)	86,200
Baby Rose (3)	153,500		
Bay (2)	216,500	Nancy B. (4)	121,700
Bonnie (2)	193,500	Nautilus (1)	68,500
Bonnie Billow (3)	347,700	Notre Dame (3)	81,300
Bonnie Breaker (1)	89,700	Nyanza (1)	1,200
Bonnie Breeze (3)	312,700		
Bonnie Lou (2)	169,300	Ohio (1)	70,400
Brighton (1)	116,500	Olympia (3)	149,700
Buzz & Billy (2)	78,000	Olympia La Rosa (4)	141,500
Cambridge (1)	163,000	Pam Ann (1)	115,300
Carmela Maria (4)	67,500	Patty Jean (2)	228,400
Catherine Amirault (1)	94,700	Phantom (2)	179,500
Catherine B. (7)	38,000	Plymouth (2)	162,600
Catherine T. (2)	112,100	Princess (1)	3,000
Cigar Joe (2)	38,700		
Comet (1)	62,000	Racer (1)	94,000
		Raymonde (4)	223,800
Dolphin (3)	92,900	Red Jacket (2)	240,200
Doris F. Amero (1)	60,300	Roma (5)	70,600
		Rosa B. (1)	107,200
Edith L. Boudreau (1)	46,700	Rosalie D. Morse (1)	64,000
Elizabeth B. (2)	245,000	Rose Mary (3)	84,800
Estrela (1)	61,400	Rosie (4)	64,300
Evelina M. Goulart (1)	57,100	Rush (1)	79,800
Flying Cloud (2)	315,700	St. Anna (9)	57,100
4-C-688 (1)	4,100	St. Cabrini (1)	35,300
4-G-673 (1)	400	St. Peter II (1)	74,500
4-H-823 (1)	3,400	St. Rosalie (2)	62,200
		St. Terese (1)	8,400
Gaetano S. (2)	105,900	St. Victoria (4)	159,600
Geraldine & Phyllis (3)	141,000	Salvatore & Grace (2)	79,000
		San Calogero (4)	91,000
Halcyon (1)	7,000	Santa Maria (4)	144,400
		Santa Rita (5)	54,400
Ida & Joseph (1)	63,000	Sea Queen (1)	46,800
		Sebastiana C. (2)	78,300
Jane B. (1)	73,800	Sherry & Scott (4)	56,800
J. B. Junior (3)	287,700	Star of the Sea (1)	33,700
Jennie & Lucia (2)	56,700	Swallow (2)	202,400
Jorgina Silveira (2)	39,900		
Josephine F. (2)	14,900	Texas (2)	192,700
Josephine P. II (2)	99,100	Thomas D. (3)	124,300
Josie M. (2)	23,000	Triton (1)	75,300
Lawrence Scola (4)	29,300		
Leonarda (3)	8,700	Villanova (2)	91,500
Leonard & Nancy (4)	131,300	Vincie N. (4)	123,300
Lorine II (1)	25,800	Virginia (1)	63,000
Lorine III (2)	44,800		
Lucky Star (1)	86,500	Weymouth (2)	135,700
		Wm. J. O'Brien (2)	177,500
Mabel Mae (1)	103,500	Winchester (1)	113,600
Magellan (4)	150,100	Wisconsin (1)	140,400

Swordfish Landings (No. of Fish)

Christine and Dan (1)	112		

NEW ENGLAND

No. 968

DOUBLE GEAR REDUCTION

Motors from 2 H.P. to 5 H.P.—AC or DC
Rope pulls up to 2200 lbs.; and line speeds up to 160 ft. per min.

For descriptive circular, write

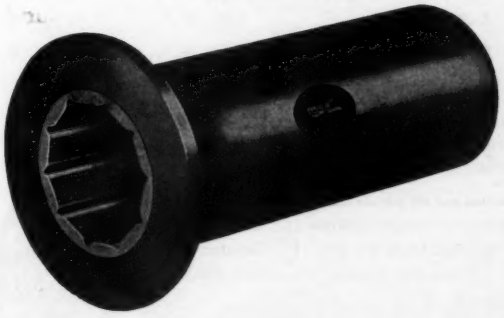
New England Trawler Equipment Co.

300 Eastern Ave. Chelsea 50, Mass.

B.F.Goodrich

Cutless Bearings

For Propeller Shafts



Soft rubber, water lubricated, Cutless bearings give years of trouble free service on fishing vessels. Resist heat, oil, and wear. Quiet and protect shafts too. There is a size and type to fit your boat.

Available at Boat Repair Yards and Marine Equipment dealers.

Lucian Q. Moffitt, Inc.

AKRON, 8, OHIO

Engineers and National Distributors

Calling all ENGINE EARS!

KERMATH **MARINE ENGINES**

SO SOUND... SO SMOOTH... SO POWER-PACKED

FROM 5 H.P. TO KING SIZE

GASOLINE

	MODEL	H.P.	CYLS.
☐	SEA-PUP	5 H.P.	1
☐	SEA-TWIN	10 H.P.	2
☐	SEA-CUB	25 H.P.	4
☐	SEA-JEEP	61 H.P.	4
☐	SEA-PRINCE	100 H.P.	6
☐	SEA-ROVER	130 H.P.	6
☐	SEA-MATE (Spec.)	160 H.P.	6
☐	SEA-FARER	225 H.P.	6
☐	SEA-RAIDER	280 H.P.	6
☐	SEA-RAIDER	580 H.P.	12

DIESEL

☐	2-127	27 H.P.	2
☐	4-226	60 H.P.	4
☐	6-298	75 H.P.	6
☐	6-529	130 H.P.	6
☐	6-935	250 H.P.	6

HYDROJET

☐	SEA-JEEP	61 H.P.	4

KERMATH MANUFACTURING CO., Detroit 8, Michigan

☐ Individual ☐ Dealer

Please send detailed literature as checked.

Name.....

Street.....

City.....Zone.....State.....

DO THIS NOW!

KERMATH MANUFACTURING COMPANY
5890 Commonwealth Avenue
DETROIT 8, MICHIGAN
Canadian Plant: Kermath (Canada) Ltd.
619 King St., W., Toronto 2, Ontario

ONE OF THE 16 INTEGRATED COMPANIES
BARIUM STEEL CORPORATION
STEEL, ALUMINUM, MAGNESIUM, FIBERGLASS

PORTLAND

Agnes & Elizabeth (3)	215,000	M. C. Ballard (2)	198,000
Alice M. Doughty (1)	38,000	Medan (1)	280,000
Alton A. (2)	34,000	Mocking Bird (2)	88,000
Andarte (3)	155,000		
Annie Louise (1)	8,000	Nora D. Sawyer (5)	47,000
Araho (2)	109,000		
Ariel (8)	51,800	Onward III (3)	17,000
Batavia (1)	22,500	Pocahontas (2)	225,000
Betty Nell (2)	11,000	Polaris (1)	160,000
Cathy & Aldie (3)	15,500		
Challenger (1)	9,600	Quincy (2)	339,000
Courier (2)	410,000		
Dart (4)	21,000	Rebecca II (2)	12,000
Dorchester (1)	175,000	Resolute (3)	115,000
Eagle (1)	177,000	St. Michael (9	47,500
Elinor & Jean (3)	72,000	Sea King (4)	83,000
Ethelina (3)	130,000	Silver Bay (2)	340,000
Gretchen & Dale (4)	27,100	Theresa R. (2)	290,000
Gulf Stream (2)	400,000		
		Vagabond (4)	185,000
Isaac Fass (2)	75,000	Vandal (2)	115,000
		Vida E. II (11)	110,400
Lawson (2)	95,000	Voyager (3)	85,000
Marie H. (1)	9,200	Wawenock (2)	435,000
Mary & Helen (9)	81,100	Winthrop (2)	354,000

Scallop Landings (Lbs.)

Adele K. (3)	21,185	Mary & Julia (2)	20,200
Empress (2)	22,000		

SEATTLE

Halibut Landings

Addington (1)	47,000	Nana (2)	46,100
Akutan (1)	48,000	New Era (1)	60,000
Albatross (1)	42,000	Nightingale (2)	45,500
Aleutian (1)	40,000	Nordby (1)	42,000
Alma (1)	48,000	Nordic (1)	45,500
Alma J. (1)	52,000	Norrona (1)	42,000
Alrita (1)	53,000	Norsel (1)	35,000
Angeles (1)	42,000	North (1)	50,000
Anne (1)	43,000	Northern (1)	50,000
Arlice (1)	47,500	Northern Light (1)	28,000
Arrow (1)	17,000	Nova (2)	63,000
Atlantic (1)	37,000		
		Oceanus (2)	45,500
Bernice (2)	42,500	Orbit (2)	49,000
Bernice R. (2)	53,500		
Bertha (1)	14,852		
Bonanza (1)	35,000	Pacific (1)	45,000
		Pierce (1)	16,000
California (1)	42,500	Pioneer (1)	54,000
Celtic (1)	55,000	Pioneer II (1)	33,000
City of Seattle (1)	80,000	Platinum (1)	28,000
Coolidge (1)	47,000	Polaris (1)	65,000
Coral (1)	53,000	Presho (1)	23,500
Dolphin (1)	55,000	Rainbow (1)	15,000
		Recovery (1)	58,000
Eagle (1)	83,000	Regina (2)	85,000
Eldorado (1)	36,000	Republic (1)	38,000
Eloise III (2)	55,500	Resolute (1)	60,000
Empress (1)	32,000	Roberta (1)	38,500
Estep (1)	38,000		
Ethel S. (2)	82,500	Salty (1)	12,500
Eureka (1)	17,000	Salute (1)	62,000
Evening Star (1)	70,000	Sanak (1)	40,000
		Sandra L. (1)	28,000
Faith II (2)	51,000	Sea Bird (1)	35,000
Forward (2)	29,400	Seagull (2)	48,500
Freya (2)	50,000	Seattle (1)	25,000
Frigidland (1)	40,000	Seymour (1)	20,000
		Sherman (1)	28,000
Gloria II (1)	27,000	Shirley J. (2)	51,000
Grant (1)	45,000	Signe (1)	58,000
		Sonja (2)	50,800
Ilene (1)	60,500	Soupfin (1)	55,000
Inez M. (1)	50,000	Summit (1)	34,000
Ivanhoe (1)	23,000	Susan (1)	55,000
		Suzanne (1)	40,000
J. B. (1)	29,500	Swift II (2)	30,500
Jo Jo (1)	7,000	Sylvia (2)	60,000
Karen T. (1)	50,000	Thor (1)	51,000
Kingfisher (1)	53,000	Tillikum (1)	32,000
Kodiak (1)	63,000	Tongass (1)	30,000
		Trinity (1)	43,000
Lady Olga (1)	26,000	Tryend (1)	40,000
Lane (1)	25,500		
Lansing (1)	31,000	Unimak (2)	40,000
Leviathan (1)	50,000	Urania (1)	45,000
Liberty (1)	58,000		
Lindy (1)	70,000	Vansee (1)	60,000
Lloyd (1)	64,000	Vashon (1)	38,000
Lualda (1)	62,000	Vigorous (1)	46,000
Lucky Star (1)	50,000	Vivian (1)	60,000
Maddock (2)	33,800		
Marconia (1)	86,000	Wesley (1)	10,000
Marilee Ann (1)	43,000	Western (1)	36,000
Masonic (1)	35,000		
McKinley (1)	80,000	Yukon (1)	20,000
Merit (1)	17,000		
Mermaid (2)	40,100	Zenith (1)	56,000

Provincetown Survey Shows Plenty of Quahogs

A shellfish survey party, led by Charles Wheeler of Woods Hole, State biologist, recently found large quantities of quahogs in the West End flats, but soft-shell clams were not found in any great quantity.

Mr. Wheeler was accompanied on the initial part of the survey which will be resumed later, by Frank Riley, Fish & Wildlife Service agent, and Joseph Ferreira, member of the Provincetown shellfish committee.

The survey was completed partially in the area near the breakwater, and quahogs of both adult and seed variety were found in abundance through the area, possibly enough to revive commercial digging, using conservation methods.

The quahog seed probably will be ready by early next year. It was felt that the flats should be kept closed for a time, but be reopened later after suitable rules and regulations had been established.

Big Mackerel Trip Landed

A total of 95,000 lbs. of large mackerel, caught in one net off Highland Light on August 24 by a 110-ft Gloucester vessel, was landed at Seafood Packers, Inc. The *Rosie and Gracie* ran into the school of mackerel and made one set of the nets for the huge catch. Another Gloucester boat fishing nearby was given 40,000 lbs. of the mackerel which the *Rosie and Gracie* couldn't handle. It was believed that the mackerel trip was the largest single catch of this type landed at Provincetown in many years.

Small Tunafish in Harbor

Thousands of small tunafish were brought in from Provincetown Harbor traps on August 23, and it was estimated both wharves would handle more than 3,000 fish before the end of the day. The harbor was literally alive with tuna, with many of them coming close enough to the wharves so that the schools could be seen by observers.

Capt. Godinho Now Boatless

For the first time in 35 years, veteran Provincetown fishing captain Domingo Godinho is without a fishing boat. He sold his craft recently in Miami.

Capt. Godinho who skippered the dragger *Clara M.* for many years, piloted the craft South last Winter to go shrimping. He brought it back as far as Miami, then sold it.

Baby Swordfish Caught in Trap

For the first time in the memory of most Provincetown fishermen, a baby swordfish was caught in one of the traps in Provincetown Harbor on August 18. The swordfish, which weighed about 30 pounds and had a sword about 2 ft. long, was caught in a Seafood Packers, Inc. trap by Capt. Manuel Motta and was landed at Town Wharf.

In addition to the swordfish, a large number of tuna were landed, all of the small variety. Capt Wells Rego brought in about 500 of the small fish from Seafood Packers' traps.

Returns from Exploratory Trip

The dragger *Priscilla V.*, Capt. Jared Vincent, returned to Woods Hole on August 10 from a seven-day trip to the Gulf of Maine for exploratory fishing under charter to the Fish & Wildlife Service.

George F. Kelly, fisheries research biologist who heads the redfish program, reported that the trip was a successful attempt to collect small redfish. Dragging operations were started east of Gloucester, working northeasterly. The scientists used an otter trawl with a fine liner where it was feasible and plankton nets in other places.

Owners and Crews Say

WHAT A BOAT!

They're talking about the ease of handling, rugged construction, skilled workmanship and finest selected materials in our especially designed . . .

Hatteras Type

68-FT. TRAWLER

Built to get you going and get you back in any weather—sea boats like the Betty SCA and Phoenix of Port Isabel, Tex.; Irene K of Fort Myers, Fla., and Miss Betty J of Punta Gorda, Fla.

Complete Package deal with your choice of engine and equipment. Convenient terms, prompt delivery. For all details see or write:

H. Marshall Oliver, Mgr.—Sales & Service

1905 S. W. 23rd Ave., Miami, Florida—Phone 4110

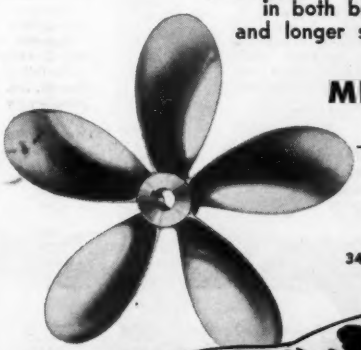
Morehead City Yacht Basin, Inc.

Phone 6-4146 Morehead City, N. C.

MICHIGAN

The TRIPLE-LIFE PROPELLERS

Two things contribute to making MICHIGAN propellers last as much as three times as long as those of ordinary bronze — a special alloy that is ALL VIRGIN metal (no scrap whatsoever) and as much as 30% more metal than most competitive wheels of comparable size. Switch to MICHIGAN and you'll get more for your money in both better performance and longer service.



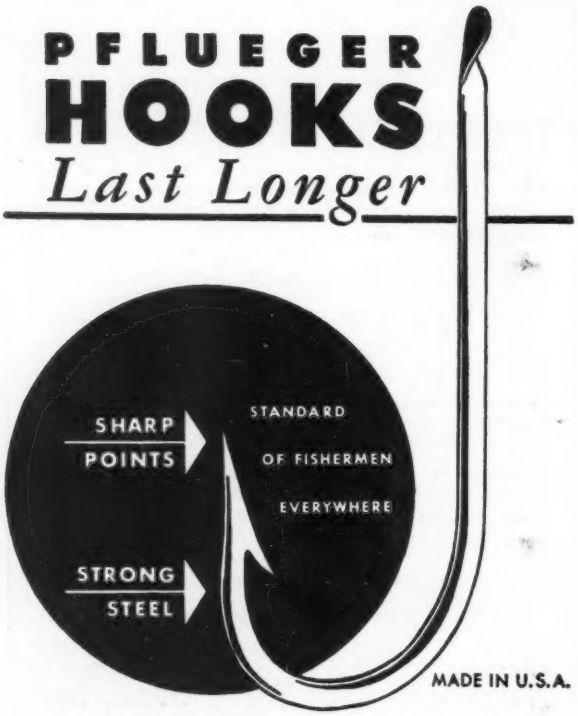
MICHIGAN STAR

the wheel that eliminates the vibration that no 3 or 4 blade wheel will cure.

34" TO 56" DIAMETERS

MICHIGAN WHEEL COMPANY, Grand Rapids 3, Michigan

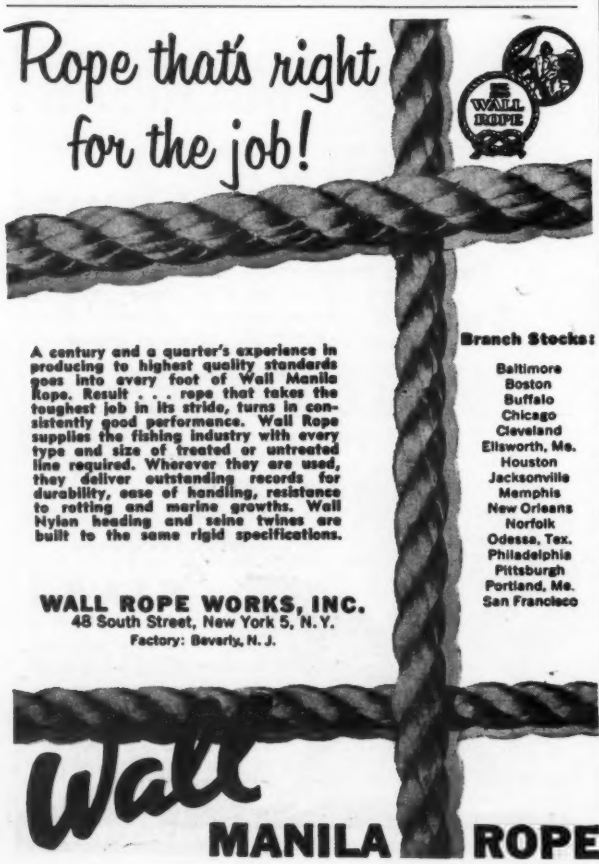
PFLUEGER
HOOKS
Last Longer



MADE IN U.S.A.

THE ENTERPRISE MANUFACTURING CO., AKRON, OHIO
PFLUEGER A GREAT NAME IN TACKLE
(Pronounced "FLEW-GER")

Rope that's right for the job!



A century and a quarter's experience in producing to highest quality standards goes into every foot of Wall Manila Rope. Result . . . rope that takes the toughest job in its stride, turns in consistently good performance. Wall Rope supplies the fishing industry with every type and size of treated or untreated line required. Wherever they are used, they deliver outstanding records for durability, ease of handling, resistance to rotting and marine growths. Wall Nylon heading and seine twines are built to the same rigid specifications.

WALL ROPE WORKS, INC.
48 South Street, New York 5, N.Y.
Factory: Beverly, N. J.

Branch Stocks:
Baltimore
Boston
Buffalo
Chicago
Cleveland
Ellsworth, Me.
Houston
Jacksonville
Memphis
New Orleans
Norfolk
Odessa, Tex.
Philadelphia
Pittsburgh
Portland, Me.
San Francisco

Wall MANILA ROPE

Pacific Salmon Fishery

(Continued from page 18)

shanked) herring hook is attached to the stainless steel leader by a double thickness of 9-ply linen salmon twine about 5 to 7" in length. The leaders are snapped on the main fishing line between the paired line stops by means of the spring wire connectors.

Baits and Lures

A number of types of baits and lures are used by the commercial salmon trollers operating on the Pacific Coast. In the early Spring, herring are used as bait. Later in the season metal spoons and wooden and plastic plugs are substituted. Herring for bait usually are purchased frozen in blocks at cold storage plants along the coast where ice also is obtained and where the fishermen generally sell their catch. The herring are freshened and thawed as needed by submerging in a bucket of salt water. Successful fishing depends largely upon the manner in which the herring is attached to the hook, a number 9 or 10, and the wobbling action that results.

A common method of hooking the herring to give it the proper action in the water so as to make it as lifelike as possible, is as follows: With the herring held in the palm, the left hand is cupped to make a curve. The hook is inserted in the herring either through the right eye or right gill opening then pushed back through the body cavity and out at the right side about 1½ to 2" from the tip of the tail. To prevent its tearing the mouth of the herring is then closed and tied with the linen twine, which is tied to the hook. A short wooden stick resembling a strong toothpick is generally inserted through the left gill and backwards through the body cavity to maintain the "kink" of the herring.

Early in the Summer many trollers change to spoons and plugs as lures for kings. On a Number 7 spoon, hook sizes 7 and 8 are used. On Number 8 spoons, hook sizes 8 and 9 are used. The most commonly used plugs are the 4 and 6" size. Number 6 or 7 stainless steel or nickel plated hooks are used with plugs. Wooden plugs are fitted with either 1 or 2 hooks depending on how the fish are biting. No more than one hook is used on plastic plugs. One hook on a plug is lighter and permits greater action in the water.

For cohos or silver salmon the best lure seems to be a spoon called an egg wobbler, with which a Number 6 hook is used. This spoon gets its name from the fact that it is shaped like an egg and about the same size.

In recent years trollers have been using a device called a "stabilizer" for reducing the roll of the boat in heavy seas. This consists of two horizontal boards, one on each side of the vessel, carried 6 to 20' under water with the flat surface of the board parallel to the surface of the water. When the vessel rolls to one side, the flat upper surface of the opposite board partially checks the roll. This checking action is exerted even when the vessel is at anchor.

The boards usually are hung from the main poles. The supporting line is run through a pulley on the mast then carried about ½ to 2/3 the way out on the pole. It is usually necessary for such vessels to outfit with heavier poles or support the poles with heavier guy-line braces.

The boards, some of wood, others of metal, vary in size and shape but are roughly 1½ to 2' long, by 12 to 16" wide, with the forward edge rounded at the corners. Most boards are supported by 3 short bridle chains, two from the forward edge and one from the aft end. On the underside of the forward edge there is usually a lead weight to keep the board down in the water. On the upper surface is a vertical fin or vane which serves to keep the board headed on the course.

The usual commercial trolling speed is from one to two knots per hour, although this depends upon the season, locality, depth of fishing, and type of fish that are being sought. A strike is noted by a sharp, jerking motion at the end of the pole.

In taking in the line, power is applied to the gurdy and

the brake is released on the one to be hauled. The clothespin, or tag line clamp, on the end of the tag line comes alongside as the line is hauled in and it is unsnapped and fastened to a bracket on the gunwale. The weight of the fishing line is then borne by the main instead of the tag line.

As empty leaders come up they are unsnapped from the main line, fastened to a short wire alongside the cockpit, and laid out on the stern. The leader with the fish also is unsnapped, fastened on the wire alongside the cockpit, and the fish brought alongside by hand. If the hook is set firmly the fish is stunned by a sharp rap on the back of the head with the gaff handle and then brought aboard with a single sweeping motion of the gaff hook.

Checkers, or partitioned holding bins, are arranged on the deck immediately forward of the cockpit where the fish are temporarily held before being dressed and packed in ice in the hold. Trolled salmon are sold by the fishermen by weight.

Long Island Fishermen Asked to Give Coast Guard Data on Radiotelephones

Long Island fishing boat owners whose vessels are equipped with radiotelephones or other electronic devices are being requested to fill out questionnaires for use by the Coast Guard so that in time of need the fishing fleet on Long Island can be called upon to render aid, as it did during the last war.

The forms are to be completed and submitted to the Coast Guard officials when application is made for Port Security Cards. The Coast Guard stresses the fact that this information is greatly needed, and urges every fishing vessel owner to cooperate.

Porgy Accounts for Sizable Part of May Catch

New York landings of commercially-caught fish and shellfish in the Marine District during May 1954 totaled 3,996,000 lbs., valued at $432,000 to the fishermen. The species landed in greatest quantity was porgies, which accounted for 33 percent of the entire catch.

Total landings for the first 5 months of 1954 amounted to 22,206,000 lbs., valued at $3,032,000 to the fishermen.

Condition of Moriches Bay Greatly Improved

Dr. George H. Vanderborgh's report on the cleanliness of Great South Bay this summer is encouraging. Dr. Vanderborgh believes that one of the factors is the smaller number of ducks being produced on waterfront farms in the Moriches Bay area. Another is the prevailing westerly winds which have helped contain duck waste in the Bay. But perhaps the most important reason, in his opinion, is the fresh flow of water brought about by the reopening of Moriches Inlet.

It is hoped that the improvement is a permanent one or can be made permanent by the cutting of a new waterway some distance east of the present Fire Island Inlet. This would insure a constant flushing action of stagnant areas and minimize the influence of the algal growth that feeds on duck waste.

It is claimed that reduction of the algal growth would restore Great South Bay as the home of the Bluepoint oyster. It also would give new life to the clamming business and would make the bay a healthy feeding ground for other fish.

Capt. Jens C. Jensen

Capt. Jens C. Jensen, 78, retired manager of the Greenport Oyster Division of the Blue Points Co., died at Greenport last month. Born in Denmark, he went to sea at the age of 17 and was shipwrecked off Germany at the age of 19. He had served on the *Peter Rittmers*, one of the largest square-rigged vessels.

If your vessel was damaged by Hurricane "Carol" and you need

a New Galley Range

We Can Ship a

WEBBPERFECTION

From Stock

Phone LOmbard 3-0534

ELISHA WEBB & SON CO. 136 S. Front St., Phila. 6, Pa.

COMPLETE REPAIR FACILITIES

OUR ALL-AROUND SERVICE includes all types of engine overhauling and repairs, rigging service, hull repairs and alterations, electrical work, etc.

YOUR ENTIRE JOB can be done quickly in our yard by experienced men.

FRANK L. SAMPLE & SON, INC.

Shipbuilders

BOOTHBAY HARBOR, MAINE

STOP EXPENSIVE HAULOUTS!

Conventional bottom paints can't give you the longer-lasting fouling resistance of "TRADEWINDS" Anti-Fouling. Bottoms protected with this highly-toxic Woolsey formula *remain clean*...and this remarkably efficient repellent also insures excellent slip and smoothness. Repaint with "TRADEWINDS" and forget that mid-season haulout.

SERVING AT SEA SINCE 1853

WOOLSEY MARINE PAINTS

C. A. Woolsey Paint & Color Co. Inc., 229 East 42nd Street, N. Y. 17, N. Y.
Warehouses: Brooklyn, N. Y., Plymouth, N. C., Jacksonville, Fla., Houston, Tex.

Give

The United Way

for ALL Red Feather Services

CELEBRATING OUR 150TH YEAR OF SERVICE TO THE FISHERMAN 1804-1954

For fast rigging and steady dependable service look to the rope with one hundred and fifty years of unexcelled background . . . there is no substitute for the Fitler Blue and Yellow trademark of quality.

Fitler Pure Manila Rope is "Waterproofed" to ensure long life and flexibility.

THE EDWIN H. FITLER CO.

NEW ORLEANS 17, LA. PHILADELPHIA 24, PA.

YOU CAN BANK ON

MUSTAD

Key Brand FISH HOOKS

for

sharpness, strength, temper and finish. They will stand the roughest kind of wear and tear and save you replacements and repair. Ask your fishing supplies dealer for Mustad hooks.

O. MUSTAD & SON

MANUFACTURERS

Established 1832

OSLO NORWAY

Sales Agents

Ed. W. Simon Co., Inc.

320 Broadway New York

Hooks shown above are Mustad-Halibut, Qual. No. 9395 Mustad-Limerick, Qual. No. 31000 Mustad-Gravitation, Qual. No. 9353

Vineyard Bailings

By J. C. Allen

All our life, and we have lived a good many years, our heart has been with the fishermen. We have been a commercial fisherman in our day, not to be distinguished in any manner, but certainly soaking up experience and making a living. And finally, having swallowed the anchor, as you might say, we never have been out of contact with the men who fish or those who handle the catch ashore.

Now it seems to us that the real, genuine old-fashioned fisherman is about gone—the man who had a mite of loyalty for his skipper, his owner, and his vessel. The old-fashioned dealer is about gone too, the man who realized all of the ups and downs that the fisherman experienced and was willing now and then, to give the sea-skimmer a real break.

We suppose that there are good and sufficient reasons why these types of men have pretty nigh vanished, but it is a matter for regret just the same, because the whole structure of the industry was founded on the willingness of men to work with each other, to cooperate and to share the bad luck with the good as it happened to come.

The old-fashioned people who ate fish in the old-fashioned way also have gone to looward. Folks no longer know how to get real enjoyment out of a round fish, cooked with the bone in and served that way. No, it's got to be skinned and boned and filleted and processed until, for God's sake, there is no resemblance of fish left!

Swordfish and Fluke Plentiful

We have catalogued things locally for August, and the tail end of July. Offhand, we suppose that the report as a whole might be regarded as encouraging. Certainly the swordfishermen haven't had such luck in years and it's a thing to be thankful for. Certainly too, there has been a run of flukes, inshore and off, and these have kept the heads of quite a bunch of men above water, financially.

There hasn't been much of anything else in the twine that mattered a whole lot. Bottom fish, stuff that handliners used to depend on, got scarce in early August. Nobody was hooking them anyhow except people who fish for fun. In middle and late August they couldn't even have fun!

Bluefish hit, large fish too, and ran just enough to bring out sport fishermen as numerous as a Naval fleet. But there has not yet been anything that promised the commercial lads a cut, and as for striped bass, they have been much scarcer.

Better Season Than Year Ago

Now it may be said and with a good deal of truth, that these commercial fishermen have made a far better season than they did a year ago. But it must be remembered that our fleet has been trimmed down to a mighty small outfit. It is fair to say that where one man has to scratch hard to make a living at fishing today, more than 20 men supported themselves and their families in the same bearings, 40 years ago. And don't bother to point out the difference in the cost of living! We know all about it, for we were there!

But we also know that the houses that were built, the kids who were sent to college, the keels that were laid and the automobiles that were bought, were paid for when flukes sold for a dollar a barrel, and lobsters brought 10¢ apiece at the caplog, never mind how much they weighed! And somebody is going to bring back this economic security by means of legislation, arbitration and appealing to reason! Horse-feathers!

Canadian Report

By C. A. Dixon

Following one of the best Summer seasons for the canning of sardines on record insofar as steady production is concerned, a slowing down of activity to quite an extent occurred in August as the big fish school at Grand Manan and in Saint John County in Southern New Brunswick petered out. Brit struck in several fishing districts in Charlotte County, and although smaller fish were welcomed by some of the packers who had been canning a size known as "four and fives" all Summer, the factory output became less due to the longer packing time required.

Sales of brit in the St. Andrews Bay area and other places are being made to fish meal plants. The price paid by the reduction plants is at the rate of $5.00 a hogshead. In addition to these sales weirmen also have been selling large quantities of silver hake to a manufacturer of canned animal food at Lubec, Me., for $10.00 a hogshead. Some of the weirmen had caught between 50 and 100 hogsheads of the hake by the end of August.

Fishermen at Grand Manan hit the high spot this year in the sardine fishing business, having had one of the best seasons on record, if not the very best. Those at Musquash also did well, and fishermen in the Courtenay Bay area of Saint John County had a run of extra good luck when hundreds of hogsheads of sardines were caught and sold by seiners from Campobello and L'Etete.

New Scale of Fish Prices

After experiencing a "price war" for more than three weeks in northeastern New Brunswick, fishermen were put in a happier frame of mind at Shippegan recently when 10 draggers with larger-than-average catches docked, and the outlook brightened for 1,000 unemployed shore workers.

A new scale of prices was announced by the packers—3 to 3½¢ a pound for large cod; 3¢ for flounders; 1½¢ for scrod and 4¾¢ for haddock. The price paid for flounders and scrod was about the same as that paid before the "price war." The amount paid for haddock was "very good."

Fish Catch Increases

Canadian fishermen took 645,325,000 lbs. of fish from the Atlantic and Pacific in the first six months this year, nearly 23 per cent more than in the first half of last year. The bumper catch was worth $28,357,000 to the fishermen.

East Coast landings in the first six months increased only slightly to 468,479,000 lbs. from 465,793,000, but the landed value rose 1.2 per cent to $22,131,000. Larger catches of groundfish more than offset a price cut which lowered the total value of the lobster catch.

Minimum Lath Spacing for Lobster Traps

Stricter enforcement of the minimum lath spacing of lobster traps to cut down the taking of undersized lobsters is contemplated by the federal department of fisheries in revised lobster regulations passed recently.

The revised regulations make it an offense for any person to use or possess in any of the lobster fishing districts in the Bay of Fundy area of New Brunswick and Nova Scotia, the southeast coast area of Nova Scotia, and part of the southeast coast of Cape Breton Island, lobster traps which do not have a continuous and unobstructed space measuring at least 1⅝ inches between the two undermost laths on each side of the trap.

In the Guysborough and Halifax area on Nova Scotia's east coast, most of Cape Breton Island, in Northumberland Strait, the Bay of Chaleur and the Gulf of St. Lawrence, the regulations call for minimum lath spacing of 1¼ inches.

Side-view showing adjustable bracket

YOU CAN BE SURE WITH A
K-W CORSAIR COMPASS
IDEAL FOR
SMALL BOATS
OVER 17,000 IN USE

- Built-in corrector system
- Special red lighting
- Versatile mounting bracket
- Half point card also available
- Unbeatable at $35.

Send for Descriptive circular

WILFRID O. WHITE & SONS, INC.
(formerly Kelvin-White Company)
178 ATLANTIC AVE., BOSTON 10, MASS.
406 Water St., Baltimore 2, Md. 40 Water St., New York 4, N. Y.
Export Dept. 100 E. 42nd St., New York 17, N. Y.
Cable address: PHILYORK

Throw Your Heat Exchanger Troubles Overboard

The AQUA-CLEAR Feeder takes all the bite out of salt water. It protects the entire cooling system—cylinder heads, manifolds, water jackets, liners—from rust, corrosion, electrolysis and salting down.

Stop these expensive repairs right away—write today for new **FREE** bulletin on marine engine cooling.

Sold and Installed by Leading Boatyards—**Over 20,000 Now In Use.**

SUDBURY LABORATORY, Box 592. South Sudbury, Mass.

AQUA-CLEAR Feeders

NETS • RAKES • TONGS

Bait Netting - Wire Baskets
Rope - Lobster Pot Heading Twine - Corks

LARGE STOCK

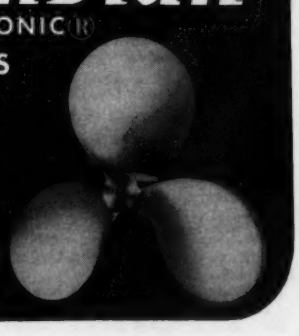
Prompt, intelligent, personal attention to your order

W. A. AUGUR, Inc.

35 Fulton Street New York 38, N. Y.
BEekman 3-0857

Columbian
HYDROSONIC®
PROPELLERS

are known worldwide for exact pitch and balance, rugged power and speed, top fuel-economy. *Diameters from 8" to 20'.* Ask for Catalog on Propellers & Marine Fittings.



COLUMBIAN BRONZE CORP.
freeport • long island • new york

WHERE-TO-BUY DIRECTORY

Companies with asterisk have display advertisements in this issue; see Index to Advertisers for page numbers

AIR STARTING MOTORS
Ingersoll-Rand, 11 Broadway, N. Y. 4, N. Y.

ALARM SYSTEMS
Brown Alarm Mfg. Co., Inc., 1631 Filbert St., Baltimore 26, Md.

ANCHORS
*Danforth Anchors, 2121 Allston Way, Berkeley, Calif.
The Maxim Silencer Co., 126 Homestead Ave., Hartford 1, Conn.
Northill Co., Inc., Los Angeles 45, Calif.

BATTERIES—Storage
Crescent Battery & Light Co., Inc., 819 Magazine St., New Orleans 12, La.
*"Exide": Electric Storage Battery Co., 42 South 15th Street, Philadelphia 2, Pa.
*Surrette Storage Battery Co., Salem, Mass.
Willard Storage Battery Co., 246 East 131 St., Cleveland 1, Ohio.

BOOTS
*United States Rubber Co., Rockefeller Center, New York, N. Y.

CANS
Continental Can Co., 100 E. 42nd St., New York, N. Y.

CLOTHING
The H. M. Sawyer & Son Co., Cambridge, Mass.
A. J. Tower Co., 24 Simmons St., Boston, Mass.
*United States Rubber Co., Rockefeller Center, New York, N. Y.

COLD STORAGE
Quaker City Cold Storage Co., Philadelphia, Pa.

COMPASSES
John E. Hand & Sons Co., 243 Chestnut St., Philadelphia 6, Pa.
*Marine Compass Co., Pembroke, Mass.
Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.
*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

CORDAGE
American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.
Cating Rope Works, Inc., Maspeth, N. Y.
*Columbian Rope Co., Auburn, N. Y.
*The Edwin H. Fitler Co., Philadelphia 24, Pa.
New Bedford Cordage Co., 131 Court St., New Bedford, Mass.
Plymouth Cordage Co., Plymouth, Mass.
Tubbs Cordage Co., San Francisco, Calif.
*Wall Rope Works, Inc., 48 South St., New York 5, N. Y.

COUPLINGS—Marine
Morse Chain Co., 7601 Central Ave., Detroit 10, Mich.

DEPTH SOUNDERS
Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.
Edo Corporation, College Point, L. I., N. Y.
Kaar Engineering Corp., Palo Alto, Calif.
Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.
*Wilfrid O. White & Sons, Inc., 216 High St., Boston 10, Mass.

DIRECTION FINDERS
Bludworth Marine, 92 Gold St., N.Y. 7, N.Y.
Kaar Engineering Corp., Palo Alto, Calif.
Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

ELECTRIC GENERATING PLANTS
D. W. Onan & Sons, Inc., University Ave., S. E. at 25th, Minneapolis 14, Minn.

ENGINES—Diesel
The Buda Co., 154th and Commercial Ave., Harvey, Ill.
*Burmeister & Wain American Corp., 17 Battery Place, New York 4, N. Y.
Caterpillar Tractor Co., Peoria, Ill.
*Cooper-Bessemer Corp., Mount Vernon, O.
Cummins Engine Co., Columbus, Ind.
*Detroit Diesel Engine Div., General Motors Corp., Series 51, 71 and 110 Marine Diesels, 13400 W. Outer Drive, Detroit 28, Mich.
*Enterprise Engine & Machinery Co., 18th and Florida Sts., San Francisco 10, Calif.
*Fairbanks, Morse & Co., Chicago, Ill.
Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.
P&H Diesel Engine Division, Harnischfeger Corp., 500 S. Main Street, Crystal Lake, Illinois.
*Kermath Manufacturing Co., 5890 Commonwealth Ave., Detroit 8, Mich.
The Lathrop Engine Co., Mystic, Conn.
Murphy Diesel Co., 5317 West Burnham St., Milwaukee, Wis.
*The National Supply Co., Engine Division, Springfield, Ohio.
Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.
H. O. Penn Machinery Co., Inc., East River and 140th St., New York, N. Y.
*Perkins-Milton Co., Inc., 376 Dorchester Ave., South Boston 27, Mass.
Red Wing Motor & Mfg. Co., Red Wing, Minn.
Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.
Wolverine Motor Works Inc., 1 Union Ave., Bridgeport, Conn.

ENGINES—Gasoline
*Chris-Craft, Marine Engine Div., Algonac, Mich.
Chrysler Corp., 12211 East Jefferson, Detroit, Mich.
Ford Marined Engines, 3627 N. Lawrence St., Philadelphia 40-AF, Penna.
Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.
*Kermath Manufacturing Co., 5890 Commonwealth Ave., Detroit 8, Mich.
The Lathrop Engine Co., Mystic, Conn.
Nordberg Mfg. Co., Lincoln Bldg., 60 East 42nd St., New York 17, N. Y.
Red Wing Motor & Mfg. Co., Red Wing, Minn.
Scripps Motor Co., 5817 Lincoln Ave., Detroit 8, Mich.

ENGINES—Outboard
*Evinrude Motors, 4760 N. 27 St., Milwaukee 16, Wis.
Johnson Motors, 6300 Pershing Rd., Waukegan, Ill.

FILTERS
Fleck Engineering Co., Inc., 1631 Filbert St., Baltimore 26, Md.

FISHING GEAR
*The Harris Co., Portland, Me.
*Westerbeke Fishing Gear Co., Inc., 279 Northern Ave., Boston, Mass.

FLOATS
J. H. Shepherd Son & Co., Elyria, Ohio.
The Sponge Rubber Products Co., Derby Place, Shelton, Conn.

GENERATING SETS
The Buda Co., 154th and Commercial Ave., Harvey, Ill.
*Detroit Diesel Engine Div., General Motors Corp., Series 51, 71 and 110 Marine Diesels, 13400 W. Outer Drive, Detroit 28, Mich.
Hallett Mfg. Co., 1601 West Florence Ave., Inglewood, Calif.
Nap. J. Hudon, 40 Fish Pier, Boston, Mass.

GENERATORS
The Safety Car Heating & Lighting Co., Inc., Marine Div., P.O. Box 904, New Haven 4, Conn.

HEAT EXCHANGERS
Sen-Dure Products, Inc., Bay Shore 1, N. Y.

HOOKS
Auburn Fishhook Co., Inc., Auburn, N. Y.
*O. Mustad & Son, Oslo, Norway.
*"Pflueger": Enterprise Mfg. Co., 110 Union St., Akron, Ohio.

INSULATION
"Styrofoam" (Expanded Dow Polysytrene): The Dow Chemical Co., Midland, Mich.

LORAN
*Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.
Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

MOTOR GENERATORS
The Safety Car Heating & Lighting Co., Inc., Marine Div., P.O. Box 904, New Haven 4, Conn.

NETS
*W. A. Augur, Inc., 35 Fulton St., New York.
Ederer Division, The Linen Thread Co., Inc., 540 Orleans St., Chicago, Ill.
The Fish Net & Twine Company, 310-312 Bergen Ave., Jersey City, N. J.
The Heminway & Bartlett Mfg. Co., 500 Fifth Ave., New York 36, N. Y.
The Linen Thread Co., Inc., 105 Maplewood Ave., Gloucester, Mass.
Moodus Net & Twine, Inc., Moodus, Conn.
Joseph F. Shea, Inc., East Haddam, Conn.
A. M. Starr Net Co., 10 Summit Street, East Hampton, Conn.
Sterling Net & Twine Co., Inc., 164 Belmont Ave., Belleville, N. J.

OIL—Lubricating
Esso Standard Oil Co., 15 West 51st St., New York 19, N. Y.
Gulf Oil Corp., Gulf Bldg., Pittsburgh, Pa.
Shell Oil Co., 50 West 50th St., New York 20, N. Y.
Socony-Vacuum Oil Co., Inc., Marine Sales Dept., 26 Broadway, New York 4, N. Y.

PAINTS
*The Federal Paint Co., Inc., 33 Rector St., New York 6, N. Y.
Henderson & Johnson, Inc., Gloucester, Mass.
*International Paint Co., Inc., 21 West St., New York, N. Y.
George Kirby Jr. Paint Co., 14 Wall St., New Bedford, Mass.
*Pettit Paint Co., Belleville, N. J.
*Pittsburgh Plate Glass Co., Pittsburgh, Pa.
*C. A. Woolsey Paint & Color Co., Inc., 229 East 42nd St., New York 17, N. Y.

PROPELLERS
*Columbian Bronze Corp., Freeport, N. Y.
Federal Propellers, Grand Rapids, Mich.
*Hyde Windlass Co., Bath, Maine.
*Michigan Wheel Co., Grand Rapids, Mich.

PROPELLER SHAFTS
The American Brass Co., Waterbury 20, Conn.

PUMPS
Jabsco Pump Co., 2031 N. Lincoln St., Burbank, Calif.

RADAR
*Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.
Raytheon Mfg. Co., 138 River St., Waltham 54, Mass.

RADIO TELEPHONES
Applied Electronics Co., Inc., 1246 Folsom St., San Francisco, Calif.

Bludworth Marine, 92 Gold St., New York 38, N. Y.
Hudson American Corp., 25 West 43d St., New York 18, N. Y.
Kaar Engineering Corp., Palo Alto, Calif.
*Radiomarine Corp. of America, 75 Varick St., New York 13, N. Y.
Raytheon Mfg. Co., 138 River St., Waltham 54, Mass.

RANGES—Galley
*Elisha Webb & Son Co., 135 So. Front St., Philadelphia 6, Pa.
The Marine Mfg. & Supply Co., 34 New Street, New Brunswick, N. J.

REDUCTION GEARS
Snow-Nabstedt Gear Corp., Welton St., Hamden, Conn.
*Twin Disc Clutch Co., 1341 Racine St., Racine, Wis.
G. Walter Machine Co., 84 Cambridge Ave., Jersey City 7, N. J.

RUST PREVENTIVE
*Sudbury Laboratory, Box 780, South Sudbury, Mass.

SEAM COMPOUNDS
L. W. Ferdinand & Co., Inc., Mica Lane, Newton Lower Falls 62, Mass.

SEARCHLIGHTS
Portable Light Co., Inc., 216 William St., New York 7, N. Y.

SHIPBUILDERS
Blount Marine Corp., Warren, Rhode Island.
Conrad Industries, Morgan City, La.
Diesel Engine Sales Co., Inc., St. Augustine, Fla.
Harvey F. Gamage, So. Bristol, Maine.
Liberty Dry Dock, Inc., Foot of Quay St., Brooklyn 22, N. Y.
*Morehead City Yacht Basin, Inc., Morehead City, N. C.
Morse Boatbuilding Co., Thomaston, Me.
*Frank L. Sample & Son, Inc., Boothbay Harbor, Me.
Siracusa Shipyard, Morgan City, La.
Southwest Boat Corp., Southwest Harbor, Me.

SILENCERS
John T. Love Welding Co., 31 Wharf St., Gloucester, Mass.
The Maxim Silencer Co., 126 Homestead Ave., Hartford 1, Conn.

STEERING GEAR
The Edson Corp., 141 Front St., New Bedford, Mass.
Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

STERN BEARINGS
*"Goodrich Cutless": Lucian Q. Moffitt, Inc., Akron 8, Ohio.
Hathaway Machinery Co., Inc., New Bedford, Mass.
*Byron Jackson Co., PB Division, P.O. Box 2493, Terminal Annex, Los Angeles 54, Calif.

TRAWL DOORS
*Industrial Blacksmith Shop, 107 Eastern Ave., Gloucester, Mass.

VOLTAGE REGULATORS
The Safety Car Heating & Lighting Co., Inc., Marine Div., P.O. Box 904, New Haven 4, Conn.

WINCHES
Bodine & Dill (formerly Hettinger Engine Co.), Bridgeton, N. J.
Hathaway Machinery Co., Inc., New Bedford, Mass.
Ideal Windlass Co., East Greenwich, R. I.
*New England Trawler Equipment Co., 300 Eastern Ave., Chelsea 50, Mass.
Stroudsburg Engine Works, 62 North 3rd St., Stroudsburg, Penn.

WIRE ROPE
American Steel & Wire Division, United States Steel, Rockefeller Bldg., 614 Superior Ave., Cleveland 13, Ohio.
*John A. Roebling's Sons Co., Trenton 2, N. J.
Wickwire Spencer Steel Division of The Colorado Fuel & Iron Corp., Palmer, Mass.

Nautical Facts

Courtesy of "Proceedings of the Merchant Marine Council"

Q. When is a tackle rove to advantage?

A. A tackle is rove to "advantage" when the block having the greatest number of parts, i.e., the one from which the holding part leads, is attached to the weight to be moved.

Q. What is the effect of hooking one tackle onto the holding part of another?

A. The effect is twofold:

(1) The power of the combination is the product of the powers of the two tackles.

(2) The speed of operation is decreased.

Q. What is the purpose of preparing a surface for painting?

A. Paint is of little value if it is applied on an insecure foundation. Loose old paint, rust, dirt, dust, moisture, grease on any surface will prevent new paint from adhering to it.

Q. What are the three basic considerations to fire protection?

A. They are:

1. Fire prevention.
2. Fire-fighting equipment.
3. Fire-fighting technique.

Q. What care should be given spare tarpaulins, boat covers, etc.?

A. Spare tarpaulins, lifeboat covers, etc., or awnings that have not been in use for some time, should be taken on deck and aired and dried occasionally. Canvas will sweat and if not dried out from time to time will rot.

Q. What is the mission of Ocean Weather Stations maintained by the U. S. Coast Guard and the functions which they perform?

A. 1. Taking and disseminating meteorological and hydrographical data.

2. Furnishing mid-ocean aids to navigation.

3. Furnishing communication facilities and check points.

4. Maintaining an effective listening net for distress messages.

5. Rescue of personnel.

6. Conducting such scientific investigations as may be directed by proper authority.

Q. When the red side light of another vessel is visible and is showing toward your green light, what action should you take?

A. The other boat has the right of way, give way.

Index to Advertisers

W. A. Augur, Inc. 51
Burmeister & Wain American Corp. 39
Chris-Craft, Marine Engine Div. 35
Columbian Bronze Corp. 51
Columbian Rope Co. 1
Cooper-Bessemer Corp. 56
Danforth Anchors 41
Detroit Diesel Engine Div., General Motors Corp. 6
Diesel Corp. of N. J. 54
Eldredge-McInnis, Inc. 54
Electric Storage Battery Co. 7
Enterprise Engine & Machinery Co. 12
The Enterprise Mfg. Co. 48
Evinrude Motors 4
Fairbanks, Morse & Co. 2
The Federal Paint Co., Inc. 11
The Edwin H. Fitler Co. 50
General Motors Corp., Detroit Diesel Engine Div. 6
The Harris Co. 54
Geerd N. Hendel 54
Hyde Windlass Co. 37
Industrial Blacksmith Shop 54
International Paint Co., Inc. 43
Byron Jackson Co., PB Division 38
Kermath Mfg. Co. 46
Marine Compass Co. 38
Wm. M. McClain, Inc. 54
Michigan Wheel Co. 47
Lucian Q. Moffitt, Inc. 45
Morehead City Yacht Basin, Inc. 47
O. Mustad & Son 50
The National Supply Co. 10
New England Trawler Equipment Co. 45
Perkins-Milton Co., Inc. 8
Pettit Paint Co. 55
Pittsburgh Plate Glass Co. 40
Radiomarine Corp. of America 44
John A. Roebling's Sons Co. 37
Frank L. Sample & Son, Inc. 49
Sudbury Laboratory 51
Surrette Storage Battery Co. 3
Twin Disc Clutch Co. 42
U. S. Rubber Co. 34
Wall Rope Works, Inc. 48
Elisha Webb & Son Co. 49
Westerbeke Fishing Gear Co., Inc. 54
Wilfrid O. White & Sons, Inc. 51
C. A. Woolsey Paint & Color Co. 49

Where to Ship in New York

Beyer Fish Co., Fulton Fish Market
Lester & Toner, Inc., Fulton Fish Market
Frank W. Wilkisson, Inc., 16 Fulton Market

GEERD N. HENDEL

NAVAL ARCHITECT

Designer of Fishing and Commercial Vessels of All Types
Specializing in Aluminum Alloy Hull and Deckhouse Construction

CAMDEN, MAINE TELEPHONE 3097

THE HARRIS COMPANY

PORTLAND, MAINE

Specializing in Fishing Boat Supplies

Marine Hardware — Dragging Equipment
Electronics — Fuel — Groceries

25 G.M. GRAY MARINE DIESELS — Model 64HN9
Twin Disc 1½ to 1; 2 to 1; 3 to 1
Completely Rebuilt
Parts for all G.M. Series

DIESEL CORP. OF N. J.
75 Ogden Street, Newark, N. J., HUmboldt 27881

INDUSTRIAL BLACKSMITH SHOP
Builders of
TRAWL DOORS for Fishing Draggers
107 Eastern Ave., Gloucester, Mass.
Telephone 3760

Commission Merchants and Wholesale Dealers in
ALL TYPES OF FROZEN SEAFOOD
WM. M. McCLAIN, INC.
231 S. FRONT ST. PHILADELPHIA, PA. 230 S. WATER ST.

ELDREDGE-McINNIS, INC.

NAVAL ARCHITECTS MARINE ENGINEERS
Specializing in Fishing Vessel Design
131 State St., Boston 9, Mass.
Walter J. McInnis Alan J. McInnis

CLASSIFIED ADVERTISING

Rates: $1.00 per line, $5.00 minimum charge. Count 9 words to a line. Closing date, 25th of month. National Fisherman, Goffstown, N. H.

FOR SALE

Cruisers, draggers, auxiliaries—all types and sizes. If you are in the market for anything in that line, please write us—no inquiry too small to merit attention. KNOX MARINE EXCHANGE, INC., CAMDEN, MAINE.

DRAGGER FOR SALE

76' dragger *Famiglia*, complete except for engine, doors and nets. In first class condition, capacity 70,000 lbs. Equipped with winch, auxiliary engine, new electric hoist, batteries, 250 fm. ⅝" cable, direction finder, telephone. New fuel tanks, steel trunk, steel mast. Capt. Salvatore Passanisi, 12 Ten Hills Rd., Somerville 12, Mass. Tel. Prospect 6-8525 after 6:30 P.M.

DRAGGER "SACRED HEART" FOR SALE

Dragger *Sacred Heart*, 65', 120 hp. Wolverine engine. Will ice 50,000 lbs. Boat now fishing out of Boston. Reasonable price. Call Everett, Mass. 7-3556.

DRAGGER "AVE MARIA" FOR SALE

65 ft. dragger *Ave Maria* with 2-year-old Cummins Diesel engine, 175 hp., reduction gear 3 to 1. Fully equipped and in very good condition. Now fishing. Radiotelephone and Fathometer. Frank Marino, 301 North St., Boston, Mass. Tel. No. RI-2-0975.

DRAGGER FOR SALE

70' dragger, 17' beam, 10' draft. 5 years old, in good condition. Fully rigged for scalloping or dragging. Loran, radiotelephone, Fathometer. Deutz 8-cylinder 230 hp. engine. Priced for immediate sale at $35,000. Reasonable offer accepted. E. Meyer, 96 Belltown Road, Stamford, Conn.

OYSTER HOUSE FOR SALE

For sale, oyster house 40' x 130' on lot 80' x 600', located in heart of North Carolina's oyster and shrimp producing area. Asking price $17,500.00. Contact George W. Clark, Belhaven, N. C.

FATHOMETER FOR SALE

1 Raytheon Fathometer Jr., 1 to 200 fathoms. 12 volt supply. Perfect running condition. Elin M. Beal, 55 Broadway, Rockland, Maine.

ENGINES FOR SALE

Fully rebuilt 90 hp. and guaranteed gasoline marine engines, $495.00. Write for bargain list. Osco Motors Corp., Philadelphia 40-AF, Penna.

DEPTH SOUNDING EQUIPMENT FOR SALE

Navy surplus hand operated depth sounding machines, including approximately 1800 ft. wire cable and one 29-lb. lead sinker at bargain prices. Write to Box 3 Grove Hall, Boston 21, Mass. Tel. Highlands 5-0492.

DRAGGER "EIDOLON" FOR SALE

Schooner-type, 47' x 13'7" x 5'7", rebuilt 1948, oak frames, mahogany planking. 225 hp. Graymarine Diesel, 15-watt radio, Jensen hoist, 200 fathoms ½" wire, 2 sets doors, 4 nets, everything in excellent condition. Now fishing, price $5000. Edward Smith, c/o White Cap Sea Food, Islip, N. Y.

DRAGGER "VENTURE" FOR SALE

40 ft. dragger *Venture*, 165 hp. G. M. 6-71 Diesel. New net. Allan Sipos, Box 143, R. F. D. #1, Holtsville, N. Y. Can be seen at White Cap Sea Food Docks, Islip, N. Y. Price $4,000.00.

WESTERBEKE FISHING GEAR CO., INC.

Grimsby Trawls
Wesco Cod-end Protectors
Wire and Manila ropes

— *Distributors* —
Boston 10, Mass.
Also store and warehouse Gloucester, Mass.

Marine Hardware
Danforth Anchors
Paints — Fittings

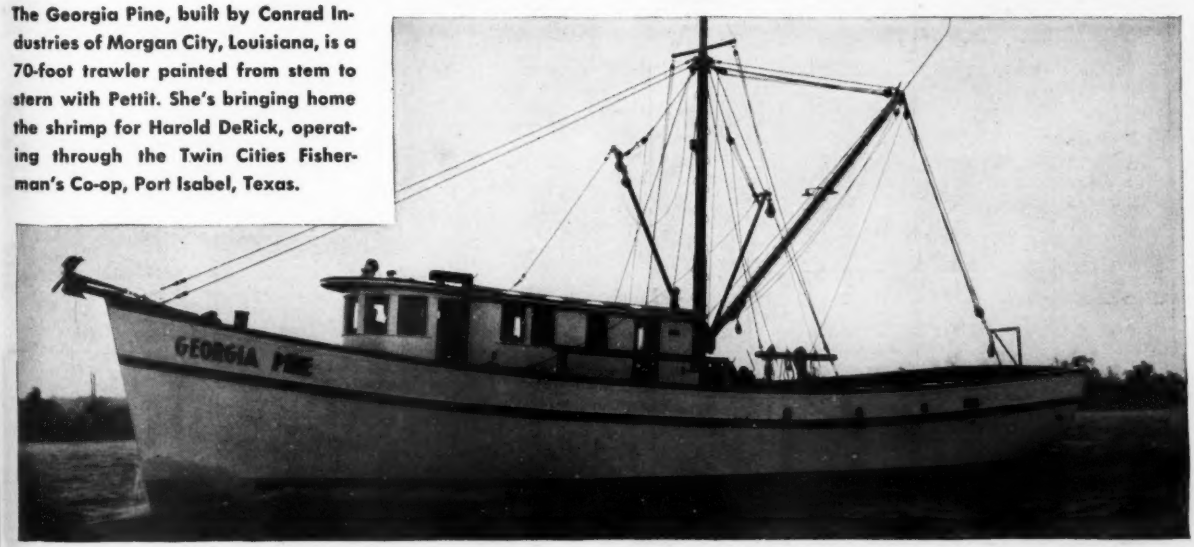
Profit Minded Shrimp Producers specify PETTIT PAINT

PETTIT PAINT CO. INC. SINCE 1861

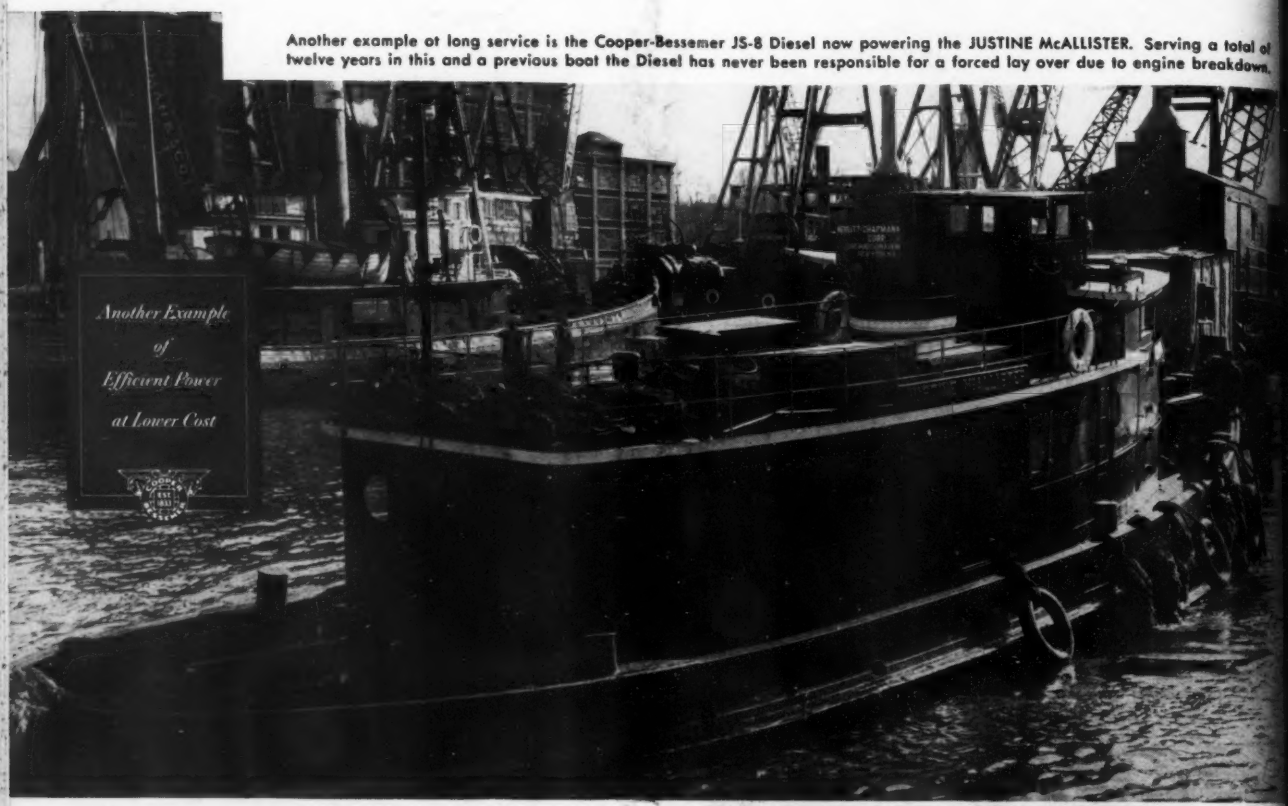
"You can't make money in dry dock," say profit-minded shrimp producers and tuna clipper operators. That's why a growing number of all kinds of commercial fishermen from the Gulf of Mexico, to the shores of the Atlantic and Pacific are specifying Pettit Paint. They have learned from experience that Pettit *quality* paints pay off by giving longer trouble-free service on the bottom as well as on the hull.

PETTIT PAINT CO., INC. BELLEVILLE, NEW JERSEY—SAN LEANDRO, CALIFORNIA

The Georgia Pine, built by Conrad Industries of Morgan City, Louisiana, is a 70-foot trawler painted from stem to stern with Pettit. She's bringing home the shrimp for Harold DeRick, operating through the Twin Cities Fisherman's Co-op, Port Isabel, Texas.



Another example of long service is the Cooper-Bessemer JS-8 Diesel now powering the JUSTINE McALLISTER. Serving a total of twelve years in this and a previous boat the Diesel has never been responsible for a forced lay over due to engine breakdown.



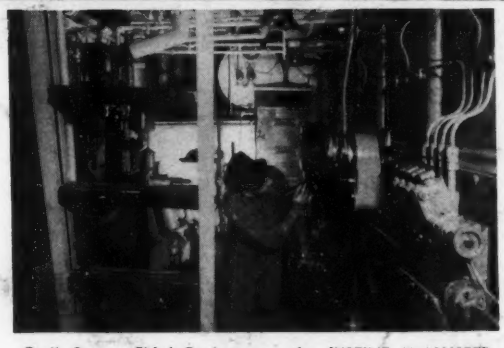
12-Year Performance

— *and never missed a tow*

DURING twelve years of tug boat service, the Cooper-Bessemer JS-8 Diesel now powering the JUSTINE McALLISTER has turned in an outstanding record of trouble-free performance. After six years of reliable operation in the now retired wooden tug BARBARA HENGES the engine was purchased by the McAllister Brothers, Incorporated.

Since 1948, the 76-foot JUSTINE McALLISTER, powered by the same 600 horsepower Cooper-Bessemer engine, has been an efficient dependable part of the McAllister fleet which has been operating in the New York harbor area for nearly a century.

What with the year in, year out reliability of Cooper-Bessemer diesel power, combined with effective preventive maintenance by McAllister engineers, the Cooper-Bessemer diesel in the JUSTINE is well on its way to another twelve year performance without missing a tow.



Cecil Green, Chief Engineer on the JUSTINE McALLISTER, checks tappets on the injectors of a 600 hp long-lived Cooper-Bessemer Diesel.

MOUNT VERNON, OHIO

COOPER-BESSEMER

GROVE CITY, PENNA.

New York, N. Y. • Washington, D. C. • Gloucester, Mass.
San Francisco, Calif. • Houston, Texas • Seattle, Wash.
Los Angeles, Calif. • Chicago, Illinois • St. Louis, Mo.
Cooper-Bessemer of Canada, Ltd., Halifax, Nova Scotia
San Diego, Calif. • New Orleans, Louisiana

DIESELS • GAS ENGINES • GAS-DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS

a total of
breakdown.

SSORS